

Item 9 – County Parks and Recreation Services/Youth Football League facilities
Further information is required. Where will these facilities be located?

Item 10 – Consideration for Harmony Elementary School
The trip generation and trip assignments should be shown in the revised traffic report.

Item 11 – Existing lane designation graphic
A graphic was provided in the comment response. This should be incorporated into the revised traffic report.

Item 12 – Consideration for approved developments in the vicinity of the proposed high school
Since no known approved and unbuilt developments in the immediate vicinity were identified by the County, the use of a yearly growth factor is acceptable. This should be noted in the revised traffic report.

Item 13 – Proposed high school trip generation
The results of the updated trip generation, trip assignments, and analysis should be included in the revised traffic report.

Item 14 – Proposed high school parking spaces
Since data was collected from nearby schools and the trip generation was revised based on local data, trip generation adjustments for parking spaces are not necessary. This matter was adequately addressed.

Item 15 – Consideration for the elementary school traffic volumes
While the traffic volumes for the elementary school are included in the study area intersection traffic counts, this is not the case at the Route 711 driveway. As shown in the school schedules, the majority of vehicular activity will not coincide. However, there will be some overlap due to faculty/staff schedules, parent drop-off, as well as other school activities that will occur outside normal school hours. This activity needs to be accounted for in the driveway volumes and the traffic analysis. The elementary school traffic volumes and driveway analysis should be included in the revised traffic report.

Item 16 – Proposed high school traffic directional distribution
The information provided in Appendix B needs clarification to show how it was used to derive the directional distribution. This should be included in the revised traffic report.

Item 17 – Proposed bus traffic
It was not clear how the bus routes were derived. Was the County school transportation staff contacted to verify if this assumption is valid? Based on the

directional distribution provided, 50% of the high school passenger car trips are forecasted to come from north of the school along Route 9, Route 611, and Route 287. The only bus route identified was from Harmony Middle School southeast of the school along Route 611. Does the County not intend to provide bus service north of the school where 50% of the traffic is forecasted to originate?

Items 18-22 Assumed and recommended intersection improvements status, responsibility, review

Comments 18-22 are all generally related to the assumed and recommended intersection improvements. These responses require clarification. It is unclear what intersection configuration assumptions were made in the traffic analyses under background and total future conditions. Furthermore, intersection improvements assumed under background conditions should be described so that the assumption can be verified. This includes identifying who will implement the improvements. Recommended improvements under total future conditions should include improvements that are being proposed to be implemented with the build-out of the high school.

Item 23 – Highway Capacity Manual (HCM) analysis

The HCM reports of Synchro are more consistent with the Loudoun County F.S.M. Traffic Study Guidelines Section 4.200, Section B.4.e than the intersection capacity utilization methodology. Our experience has shown the HCM reports tend to have slightly more conservative results for delay and levels of service. On the other hand, if the intersection capacity utilization methodology was agreed to by the County in the scoping meeting than this analysis methodology will be acceptable. The revised report should identify the analysis methodology directed for use by the County.

Item 24 – Traffic analysis assumptions

This information should be included in the revised report.

Item 25 – Proposed Route 711 driveway turn lane storage length

This item will need to be revisited once the revised analysis and report are provided.

Item 26 – Site access

This item will need to be revisited once the revised analysis and report are provided. While the traffic analysis may indicate that a single driveway will provide acceptable levels of service, a second entrance is recommended due to the large amount of activity that typically occurs at elementary and high schools during all times of the day and week. A second access point will help disperse traffic more efficiently onto the surrounding roadway network and provide an alternate exit point in cases of special events and emergencies or an incident at the entrance along Route 711.

Thank you for the opportunity to review the traffic impact study comment responses. Should you have any questions, please feel free to contact me at 703-674-1300.

"Facilities provided at the school site will afford active recreational opportunities for the community." The applicant should specify which school facilities would be available for community use and under what conditions. For example, the track and football field at Loudoun Valley High School are currently off limits to the community.

Response: For all school facilities, first priority is given to students and then the facilities are made available for scheduled use. Loudoun County Public Schools and the Parks and Recreation Department have a long standing relationship in the shared use of facilities. Use may be scheduled through the athletic directors at the school or through the Department of Parks and Recreation activities. The new high school facilities will be made available to the community in this same manner.

Comment 5: For the section concerning adequate service by essential public facilities and services (Group 4, paragraph L) and the section concerning adequate infrastructure (Group 4, paragraph R), the provision of water and sewer utilities is not adequately addressed. There should be a complete description of these systems, the proposed operator, and, perhaps as part of the paragraphs addressing conformance with the comprehensive plan, a justification of the systems with regards to PUGAMP.

Response: Please reference response under Comment #2 above.

Comment 6: For the section concerning anticipated odors that may impact adjacent landowners (Group 4, paragraph S), it is possible that the septic drainfields could make an offensive odor. Have Health Department approvals of the three proposed uses of the drainfields been issued?

Response: The drainfields will receive water that is treated to secondary standards, which is higher than conventional septic tank effluent. Therefore, the water will not have any discernable odor. The Health Department has approved the Mountain View Elementary School drainfields which are currently being utilized per the operating permit issued by the Health Department. The soil work performed for the HS-3 drainfields has also been submitted and approved by the Health Department. There is drainfield area on the Fields Farm property approved and available for use by the Upper Loudoun Youth Football League. The Board of Supervisors has approved the use of pump and haul for the ULYFL. Should the ULYFL desire to install a septic system in the future, they would need to secure a permit through the Health Department to utilize the available drainfield area.

Traffic Impact Analysis

Comment 7: It would be helpful to have more information (projected hours of operation, projected number of buses servicing both schools, projected number of parking spaces for students and faculty, projected number of faculty and staff, etc.) about this proposal. We assume that the sports fields included on the HS-3 site will generate traffic during a significant number of evenings, but we do not see that in the traffic impact analysis. Information about the existing Mountain View Elementary School would also be helpful to understand how the two schools' transportation activities will interact. For the same

reason, information about the Loudoun County Parks and Recreation Services/Upper Loudoun Youth Football League facilities, including but not limited to the projected number of parking spaces would be helpful.

Response: Classes at Mountain View Elementary School begin at 7:50 a.m. and are dismissed at 2:35 p.m. Presently there are eighteen buses providing transportation to the school. The student enrollment as of 9/29/06 was 763 and the building program capacity is 770. There are 81 faculty/staff. There are 113 parking spaces.

The 2006-0007 high school class start time is 8:55 to 9:00 a.m. and dismissal is 3:43-3:48 p.m. It is projected that the proposed high school at Fields Farm would have similar class hours and that approximately 40 buses would provide transportation to the school. The student capacity of the building is proposed at 1600 and the projected number of faculty/staff is 200. The Special Exception Plan provides for 1,025 parking spaces.

Because the class start and dismissal times for the elementary and high school are an hour apart there should be minimal interaction between the two. As with all Loudoun County public schools there will be activities held in the evenings and on weekends. The primary use is the peak class time which is what was utilized for the traffic analysis.

The Special Exception Conditions for the Upper Loudoun Youth Football League recreational facilities (SPEX 2004-0009) provides that the hours of operation shall be Monday through Saturday 8:00 a.m.-11 p.m. and Sunday 11 a.m. to 11 p.m. The Special Exception Plat depicts 597 spaces, which may be adjusted upon final engineering requirements.

Comment 8: Was Mountain View Elementary School included in the traffic impact analysis?

Response: The traffic from Mountain View Elementary School was accounted for in the traffic study. The traffic data was collected in 2005 while school was in session between the hours of 7-9am and 2-4pm, these time periods cover this start and dismissal of Mountain View Elementary school.

Comment 9: Were the Loudoun County Parks and Recreation Services/Upper Loudoun Youth Football League facilities included in the traffic impact analysis?

Response: As a part of all traffic studies there is a requirement for a background traffic growth factor. The Loudoun County Parks and Recreation Services Upper Loudoun Youth Football League (ULYFL) facilities are reflected as a part of this annual growth assumption, which in this particular study was assumed at five percent. It should also be noted that the ULYFL facilities peak hours would not coincide with the peak hours (weekdays 7 am to 9 am and 2-4 pm) of this traffic analysis.

Comment 10: What assumptions were made for the proposed Harmony Elementary School? It would be helpful to see trip generation and trip assignments for this proposed

school.

Response: It was assumed that Harmony Elementary School would be in operation. A preliminary attendance zone for Harmony Elementary School was provided by LCPS and projected traffic volumes were added to the collected/projected background traffic volumes. Based on the attendance zone, the elementary school traffic will primarily utilize the Route 287 corridor.

Comment 11: It would be helpful to show a graphic, similar to Figure 2a, depicting the existing lane designations and which of the study area intersections are signalized.

Response: Figure 1 (attached) provides a graphic illustrating (1) which intersections were analyzed, (2) the type of traffic control present at each location, and (3) the existing roadway geometrics.

Comment 12: Have all trips associated with approved developments in the immediate vicinity that have not been built yet been included in the background traffic volumes?

Response: The purpose of including a background growth assumption is to incorporate anticipated growth. In this particular study, a 5% growth factor has been included.

Comment 13: Trip generation appears to be reasonable, but it might be helpful to supplement the ITE trip generation equations with local data from other Loudoun County high schools. This area's socioeconomic demographic is predominantly affluent and it would be expected that there would be more vehicles per household, which could result in a higher trip generation rate for students.

Response: Traffic data was collected at several local elementary, middle and high schools in the Loudoun area. This data was compiled and compared to the rates provided by the ITE Trip Generation Manual, 7 Edition. Tables 1A and 1B (attached) present a summary of data collection effort and a comparison with the ITE trip generation rates.

The original site-generated traffic estimates are shown on Figure 2 (attached)

A revised site-generated traffic estimate was prepared (see Table 1C). This data was also used as a basis to prepare Figure 3 (attached), which summarizes estimated school traffic at the analyzed intersections assuming the increased site-traffic based on the Loudoun County data. The Loudoun-specific trip generation rates resulted in a 218 vehicle trip increase during the AM peak and 151 vehicle trip increase during the PM peak. Given the distributed nature of the high school traffic, the additional impact to a majority of the intersections is minimal, equating an additional 20-30 vehicles at most intersections. The most heavily impacted intersections are the Route 690/Allder School Road, Route 611/Allder School Road, and Allder School Road/HS Entrance intersections. With the proposed improvements, each of these intersections operate at LOS "C" or better, a full letter grade about the required minimum. It is not anticipated that the additional vehicle trips would result in unacceptable levels of service/operational conditions at these locations.

Comment 14: Was the number of proposed high school parking spaces factored into the proposed high school trip generation?

Response: No. The provided trip generation rates were calculated using the number of students as the independent variable.

Comment 15: While the schedules for the elementary school and the proposed high school are proposed to be staggered there will likely be activity from the elementary school during the high school peak hours. This activity should be included in the traffic volumes at entrance onto Route 711.

Response: Traffic data was collected between 7-9am and 4-6 pm. The peak hour during each of these periods was used for background traffic, not the hour that coincides with the start/dismissal time of the proposed high school. This approach provides a true "worst case scenario" with regard to background traffic.

Comment 16: It was not clear how the directional distribution assumptions were derived. It would be helpful to have a graphic showing where the school student population, separated by elementary school, middle school, and high school, is projected to be located.

Response: The directional distribution of traffic is based on the location of the potential student population and the available road network that links the students to the proposed high school. The location of the anticipated student population is based on 2005 enrollment figures. All students were geocoded utilizing ARC/INFO, thus providing accurate data based on each student's residential location. The student populations for grades 6, 7, 8, and 9 were used as a basis for the location of the students who would potentially be attending HS-3 in the fall of 2008. This information is contained in Appendix B of the submitted traffic study.

Comment 17: It would be helpful to show a separate directional distribution for projected bus traffic. Are bus routes factored into total traffic? How about probable routes faculty and staff will take?

Response: It is anticipated that bus traffic will follow the route highlighted on Figures 2 and 3 (attached); this information was also shown on Figure 4 in the original traffic study. Bus routes were taken into consideration with regard to traffic flows and operations. The remaining site traffic was distributed based on the location of the student body within the attendance zone.

Comment 18: The 2008 total future conditions without improvements were not included in the capacity analyses. It would be helpful to see how the intersections are projected to operate without improvements.

Response: The delays and levels of service presented in the traffic study for the 2008 conditions assumed existing road geometries; the recommended turn lanes and traffic signals were not included in the analyses. Representatives from Loudoun County Transportation Services and the

Town of Purcellville did not provide any scheduled/potential roadway improvements during the preparation of the scoping agreement.

Comment 19: What was the basis for the recommended intersection improvements for the projected background traffic volumes? What is the status of these improvements? Are any of them funded or planned by the County or the Town? Were these improvements discussed with the County or the Town? [Obviously, this comment is from our consultant. At Business Route 7 and Route 287, the Town's preferred improvement is a roundabout, for which we have a conceptual design. The Town does not propose to fund this roundabout, or any other listed improvement, except for traffic signals at Business Route 7 and Hatcher Avenue and at Business Route 7 and 23rd Street.]

Response: The basis for the proposed improvements were (1) existing/projected background traffic volumes and (2) intersection delay. The guidelines for these recommendations are provided in the *VDOT Road Design Manual* (Appendix C), the *VDOT Land Development Manual*, and *F.S.M. Traffic Study Guidelines* provided by Loudoun County's Office of Transportation Services (OTS).

Several of the recommended improvements are currently in preliminary design.

The Town has indicated above that it will fund a traffic signal at the Route 7/Hatcher Avenue intersection. This improvement was not recommended in the HS-3 traffic impact study.

Comment 20: It is unclear if the recommended intersection improvements with the build-out of the high school are being offered to be constructed with the school.

Response: The traffic study has recommended certain school related transportation improvements that should be done in conjunction with the construction of the high school. Those improvements, identified in the study as "school-related" are currently in preliminary design. These improvements/intersections are shown graphically on Figure 4 in the highlighted circles. Loudoun County Public Schools will work with the County of Loudoun to determine the appropriate funding and implementation of road improvements.

The remaining recommended improvements are related to background traffic volumes, indicating operational deficiencies which currently exist or will exist in 2008 even without traffic from the proposed high school. Loudoun County Schools does not anticipate funding these improvements.

Comment 21: It would be helpful to show a graphic depicting the proposed intersection improvements, both for the background and total future conditions.

Response: Figure 5 (attached) shows those intersection improvements which are warranted due to background traffic volumes. Figure 6 (attached) shows those improvements which are warranted by traffic generated by the proposed high school.

Comment 22: Our review did not examine the proposed improvements in detail due to our

questions about trip generation and trip assignment. We can provide this review once the assumptions and methodology items have been addressed. [Again, this is from our consultant.]

Response: No response required.

Comment 23: The Highway Capacity Manual (HCM) signalized and unsignalized reports were not used in the Synchro analyses; instead the intersection capacity utilization methodology reports were used. The HCM reports tend to have slightly more conservative results for delays and levels of service.

Response: Intersection Capacity Utilization provides a straight forward method to calculate an intersection's level of service. The method simply takes a sum of the critical movements' volume to saturation flow rates. ICU is an ideal solution for traffic planning purposes. Its intended applications are for traffic impact studies, future roadway design, and congestion management programs.

Comment 24: What assumptions were made for the traffic analyses? Were peak hour factors utilized? Were percent heavy vehicles adjusted for turning movements along the projected bus route? Were the existing traffic signal timing/phasing used?

Response: The assumptions are specified in the OTS scoping agreement and the traffic report itself. The default peak hour factors were utilized. Heavy vehicles (i.e. busses) were taken into consideration along the proposed bus route. Existing signal timings were used for 2006 conditions and 2008 background condition; these timings were modified/optimized for the 2008 total conditions.

* The original scoping agreement with the Office of Transportation Services included 4 intersections in the immediate vicinity of the proposed high school. A revised study outline was presented to Loudoun County Public Schools by the Office of Transportation Services after soliciting input from the Town of Purcellville; the revised study outline included 18 intersections. The additional intersections requested specifically by the Town (via e-mail) were limited to the Main Street corridor.

Comment 25: Will the existing eastbound Route 711 right turn lane have enough storage length to accommodate the proposed high school traffic? How much storage should the recommended westbound Route 711 left turn lane provide? A queue analysis would be helpful to determine these lengths.

Response: Yes, there will be sufficient storage to accommodate right turning eastbound vehicles. The westbound left turn lane design includes 200' of storage and 200' taper. A queue analysis can not be performed on an unsignalized intersection.

26. Will the existing single egress lane from the Mountain View Elementary School adequately accommodate the both the elementary school and the proposed high school traffic? Has any consideration been given to providing an additional turn lane at the

driveway and/or additional access points? It would be helpful to have additional access points for special events such as emergencies or evening school events (football games, graduation, etc.).

Response: LOS analysis indicates the NB approach will operate at acceptable levels of service during both the AM and PM peak periods, assuming the presence of only one lane. The proposed Route 690 entrance will provide secondary emergency access; this 12' facility will not be open to the general public for daily use by school-related traffic.

Environmental Resources

Comment 27: How will stormwater runoff be managed?

Response: The design standards and provisions of the most current VDOT Drainage Manual, Virginia Erosion and Sediment Control Handbook, Virginia Stormwater Management Handbook and the Loudoun County Facilities Standards Manual Chapter 5 will be utilized in the design of the Stormwater Management and Best Management Practices (BMP) for the High School Site Plan. As shown on sheet C3.0 there will be three kinds of low impact design practices utilized, Enhanced Extended Detention Basin, Extended Detention Basin and Bioretention Basins. These practices will be utilized to facilitate and enhance the pollutant removal from stormwater runoff by means of gravitational settling, wetland plant uptake, absorption, physical infiltration, decomposition and evaporation. The design of the site Stormwater Management Facilities shall be provided with the High School Site Plan in the event that an adequate receiving channel for site runoff does not exist or can not be provided. These facilities will attenuate the post-developed peak runoff rates from the one and ten year storm events, considered individually, and release at or below the pre-developed level.

Comment 28: Has the impact on existing wetlands been assessed? Is the floodplain crossing properly addressed with both the U.S. Army Corps of Engineers and with Zoning Ordinance requirements?

Response: The impact to the existing wetlands area will be minimized with the site plan. The impact will be less than 300 linear feet and 0.1 acre. The impacts will occur at the floodplain crossing in the middle of the site. The floodplain crossing will require a FPAL study to be submitted and approved by Loudoun County Building and Development pursuant to Chapter 5 of the Facility Standards Manual.

Comment 29: Please provide Health Department approvals for the three proposed uses of the drainfields, including Mountain View Elementary School, the ULYFL/LCPRS recreation facility, and HS-3.

Response: The Health Department has approved the Mountain View Elementary School drainfields, which are currently being utilized per the operating permit issued by the Health Department. The soils work performed for the HS-3 drainfields has also been submitted and

TABLE 1A
LCPS DATA COLLECTION SUMMARY

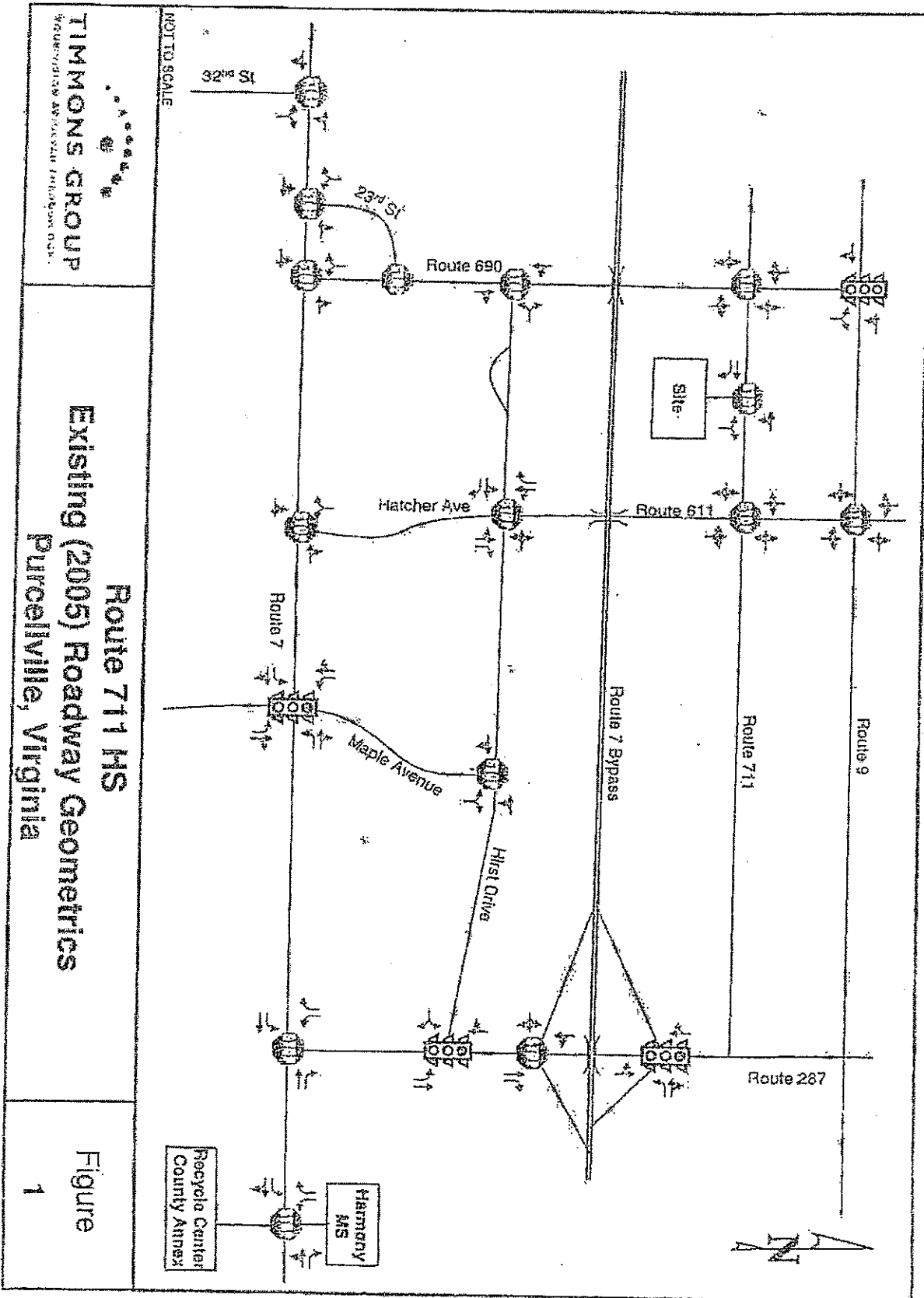
LCPIS Summary Information - 1/23/2016 to 3/2/2016													
Bursess	AM Enter	AM Exit	PM Enter	PM Exit	# Students	AM Tips	Thrs/Student	% Enter	% Exit	PAI Yrns	Thrs/Student	% Enter	% Exit
Evangelical Mill Elementary	17	161	94	45	62	0.36	289.00	0.34	0.62	0.38	141.00	0.44	0.58
Lovettville Elementary	12	106	97	38	54	0.46	217.00	0.47	0.54	0.46	110.00	0.43	0.55
Kearnsdale VBY Elementary	18	158	124	43	78	0.79	318.00	0.45	0.55	0.45	164.00	0.22	0.38
Reourd Hill Elementary	9	182	134	48	67	0.51	314.00	0.62	0.64	0.46	131.00	0.26	0.42
Hannony Intermediate	77	208	170	100	135	10.41	532.00	0.47	0.56	0.44	222	0.42	0.58
Blue Ridge Middle	75	227	161	77	165	10.92	538.00	0.52	0.60	0.44	302.00	0.37	0.45
J.L. Simpson Middle	24	237	184	65	124	7.44	448.00	0.40	0.69	0.42	234.00	0.31	0.38
Heritage High	30	489	443	95	306	15.02	882.00	0.53	0.68	0.44	481.00	0.32	0.41
Louisiana County High	Location 1		93		65			0.44	0.74	0.26		0.31	0.22
Location 2	28	282	17	42	81								
Location 3			36		39								
Location 4	29	283	71	88	145								
Louisiana Valley High		515	217	128	284	12.44	780.00	0.64	0.80	0.31	480.00	0.39	0.33
Location 1													
Location 2	82	130	11	14	25								
Location 3		232	26	60	170								
Location 4	84	172	77	32	155								
		334	144	106	330	14.40	812.00	0.53	0.76	0.24	620.00	0.43	0.30
								0.65	0.73	0.27		0.37	0.30

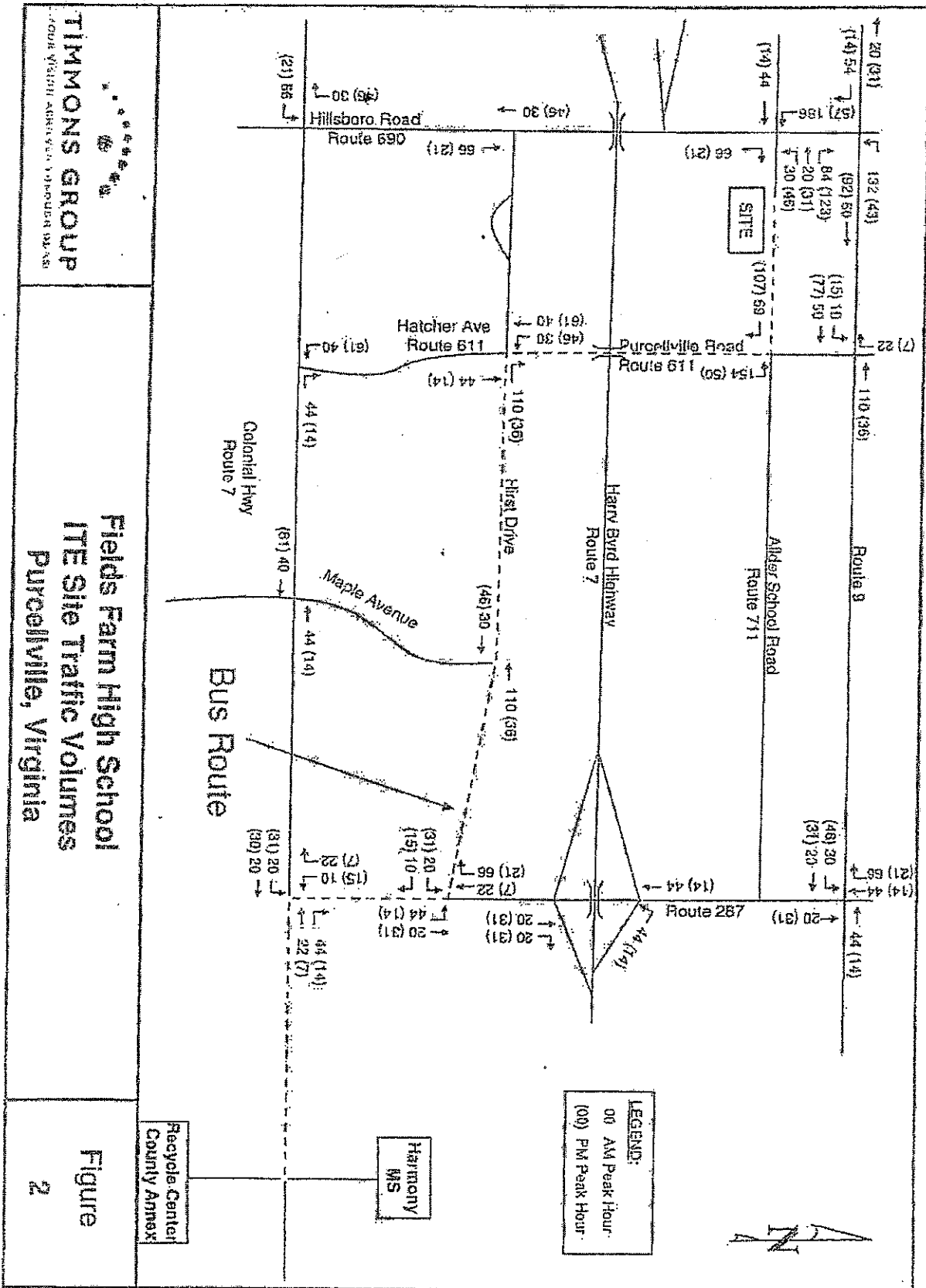
TABLE 1B
TRIP GENERATION COMPARISON: LCPS VS ITE

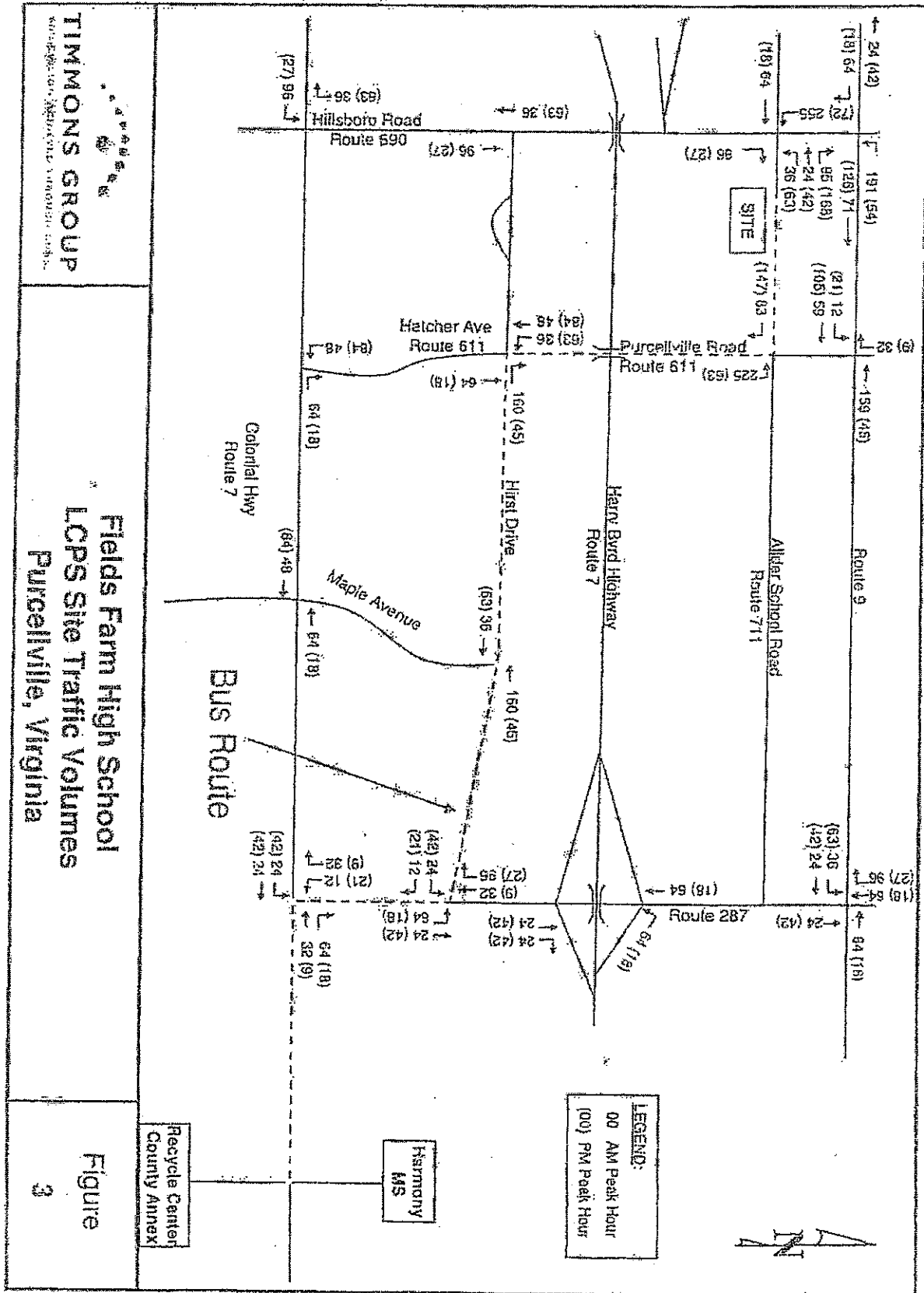
School Type	Trip Comparison LCPS vs ITE Averages					
	AM Peak			PM Peak		
	Trips/Student	% Enter	% Exit	Trips/Student	% Enter	% Exit
Elementary School						
ITE Average	0.42	0.55	0.45	0.28	0.45	0.55
LCPS Average	0.47	0.56	0.44	0.22	0.42	0.58
Middle School						
ITE Average	0.53	0.55	0.45	0.3	0.45	0.55
LCPS Average	0.53	0.56	0.44	0.32	0.41	0.59
High School						
ITE Average	0.41	0.69	0.31	0.28	0.32	0.68
LCPS Average	0.55	0.73	0.27	0.37	0.30	0.70

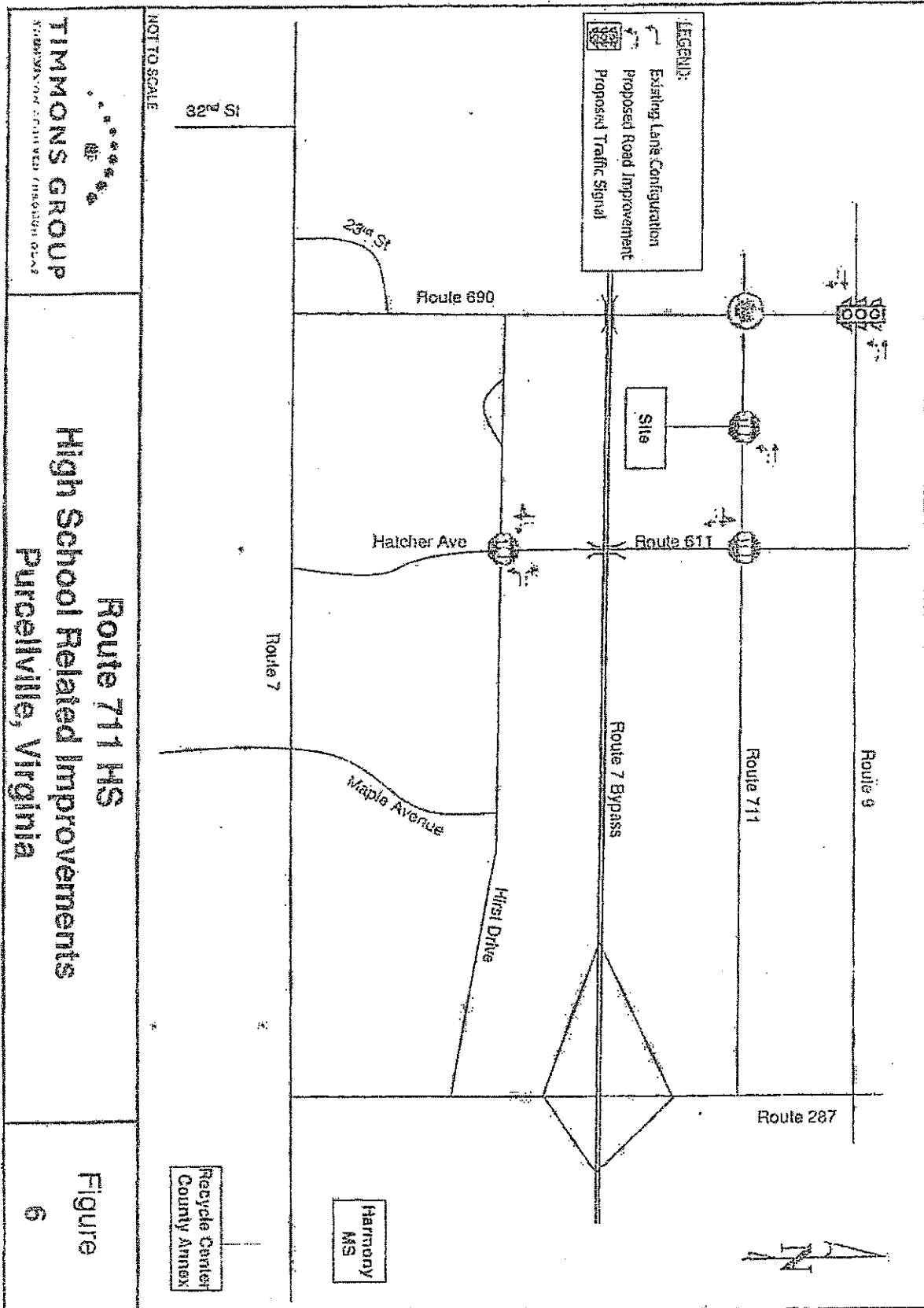
TABLE 1C
TRIP GENERATION ESTIMATES: 1,600 STUDENT HS

Comparison of High School Trip Generation Rates						
1,600 Student High School						
AM Peak Trips			PM Peak Trips			
Total	Enter	Exit	Total	Enter	Exit	
ITE Average	656	453	203	448	143	305
LCPS Average	874	837	237	599	180	419
Difference	218	186	34	151	37	114









Mayor
Robert W. Lazaro, Jr.

Council
Gregory W. Wagner
Christopher J. Walker, III
Thomas A. Priscilla, Jr.
Stephen Varnecky
James O. Wiley
Janet S. Clarke

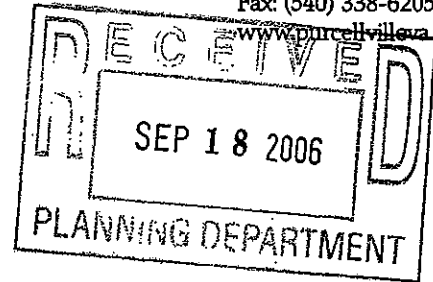


Town Manager
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Assistant Town Manager
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MEMORANDUM



Date: September 18, 2006

To: Rodion Iwanczuk, Planner, Loudoun County Division of Community Information and Outreach

From: Wayne Lee, Purcellville Assistant Town Planner

Re: HS-3 Special Exception referral

Thank you both for the opportunity to comment on this application and for the extension of time which has allowed us to better prepare the following comments. Many of our traffic impact analysis comments were prepared by a professional consultant:

Commission Permit

1. A Commission Permit from the Purcellville Planning Commission is necessary for location of this high school at Fields Farm. The Fields Farm property is located entirely within the PUGAMP planning area and is therefore subject to the policies contained in PUGAMP. This is further supported by the County's Revised General Plan, which specifically states, on page 9-23, that development within the JLMA will comply with the PUGAMP. A high school is not shown for this site on Figure 10, Existing and Proposed School Locations map on page 48 of the PUGAMP (See Attachment A). The Purcellville Director of Planning and Zoning (the Director) determined on May 24, 2006 that a high school is not a "feature shown" on or in the vicinity of Fields Farm within the PUGAMP plan and, thus, in conformance with Virginia Code Section 15.2-2232, that a commission permit is required to locate a high school on Fields Farm. The Director also believes that, since PUGAMP is a jointly adopted comprehensive plan in accordance with the Town/County Annexation Agreement and Virginia Code Section 15.2-2231, both the Town and Loudoun County Planning Commissions must approve a commission permit for the high school at this location.

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Virginia Code Section 15.2-2232 outlines State law regarding the legal status of a comprehensive plan and specifies that properly adopted comprehensive plans "shall control the general or approximate location, character, and extent of each feature shown on the plan" and further that, "unless a *feature is already shown* on the adopted master plan ...no building or public structure...shall be constructed, established or authorized, unless and until the general location or approximate location, character, and extent thereof has been submitted to and approved by the [planning] commission as being substantially in accord with the adopted comprehensive plan...." [emphasis added].

Figure 10 of PUGAMP is entitled "Existing and Proposed School Locations". The dashed line on that figure is the boundary of the PUGAMP area. There are general locations shown on Figure 10 for proposed elementary, middle and high schools (designated by an outline E, M and H, respectively). It is important to note that the proposed school sites were not arbitrarily placed on Figure 10 when the plan was adopted in 1995. The proposed high school was located along the Rt. 287 corridor due to its convenient access to the grade-separated interchange with the Rt. 7 Bypass and its location within the largest land holding at the time within the PUGAMP area (the Wright Farm, which was under single ownership and included approximately 484 acres on both sides of Rt. 287). Since the School Board sometimes receives donated school sites as part of proffered rezonings and Wright Farm was an area designated for permitted higher residential zoning in PUGAMP, the proposed high school on Wright Farm could potentially have been donated through a rezoning application covering this site.

The proposed Fields Farm location fronting on Route 690 is on the northwestern edge of the PUGAMP area in a completely different quadrant approximately two miles from the designated high school site on Figure 10 on the northeastern edge of the PUGAMP area east of Route 287. The entire width of the PUGAMP area on the north side of Route 7 is only approximately 3 miles.

As noted, there were also reasons the high school was located on the northeast side of PUGAMP, rather than on or near Fields Farm, which lacks access to the Rt. 7 Bypass. An elementary school is shown on Figure 10 approximately on Fields Farm, so the Town did not object to the County's location of Mountain View Elementary School on Fields Farm without a commission permit from either the Town or County Planning Commissions.

The related PUGAMP text also supports the necessity for a commission permit for the school at this location. The text on page 47 states that:

"The preferred location for new school sites is shown on Figure 10, p. 48. The Loudoun County School Board and School Administration staff will be requested to re-evaluate school needs and preferred locations following completion and adoption of the Sewer and Water Master Plan and once a phasing proposal for the UGA is complete (see also Phasing Policy #3, p. 58)."

This text establishes that Figure 10 is the part of PUGAMP containing the location of proposed school sites. It also indicates that there will be a process involved if these preferred school sites are to be changed once certain other studies are completed.

The issue here is not whether or not Fields Farm is an appropriate location for a high school, but rather that there is a process that must be followed prior to locating a high school there, because a high school is not a "feature shown" on or in the vicinity of the Fields Farm site. The need for a specific process to change the preferred school locations was noted above and is further specified on page 58 in the Phasing portion of the PUGAMP Implementation Chapter (also referenced on PUGAMP page 48 cited above). This text, paragraph #3 of page 58, states:

"The Town and the County will work jointly with the Loudoun County School Board and School Administration staff to re-evaluate school needs and preferred locations for new schools once the 10-year preferred development pattern is identified and ultimate densities are determined following completion of the Sewer and Water Master Plan."

If the proposed school sites could be moved arbitrarily and unilaterally within the PUGAMP area by Loudoun County without Town approval or involvement, the joint Town/County re-evaluation process required on pages 48 and 58 of PUGAMP would be unnecessary.

Although the referenced studies in paragraph #3 in page 58 have been completed since adoption of PUGAMP in 1995, the process of reevaluating these preferred school sites has never taken place. There are several ways that the proposed or preferred school sites shown on PUGAMP Figure 10 could be changed in accordance with the intent of PUGAMP policies regarding such a process, as stated on pages 48 and 58 cited above.

One way would be to amend the PUGAMP plan, which is the Town and County comprehensive plan for the PUGAMP area, to change Figure 10 to show a high school on Fields Farm. This would require recommendations by both the County and Town Planning Commissions and approval by both the Town Council and the Board of Supervisors, in accordance with the Town/County Annexation Agreement, relevant State law and Town and County comprehensive plan amendment procedures.

A more expeditious way is usually the commission permit process, as suggested by the Town and as discussed at length above. Since PUGAMP is the governing comprehensive plan of both the Town of Purcellville and Loudoun County for the Fields Farm site, in the absence of a PUGAMP amendment *the commission permit process must be followed by the Town Planning Commission and, in the Town's opinion, the Loudoun County Planning Commission, and a commission permit must be issued by both the Town and County Planning Commissions prior to authorization of a high school at Fields Farm.*

Communal systems

2. No information has been provided concerning water & sewer facilities planned to serve the HS-3. The Town is very concerned that the county may propose sharing the existing utility facilities serving Mountain View Elementary School and/or approved for the Upper Loudoun Youth Football special exception with HS-3. Such shared facilities would constitute a communal system. PUGAMP prohibits the use of communal wastewater treatment systems and communal water supply systems in the JLMA. It further states that Purcellville will be the designated provider of municipal water and sewer service in the JLMA unless another provider is mutually agreed upon by the Town and the County.

Statement of Justification

3. The Town disagrees with the assertion that the proposed HS-3 is consistent with PUGAMP, a comprehensive plan jointly adopted by the Town and the County. See our comments #1 and 2 above for explanation of our disagreement.
4. Of open space assets (Group 3), the Statement of Justification says, "Facilities provided at the school site will afford active recreational opportunities for the community." The applicant should specify which school facilities would be available for community use and under what conditions. For example, the track and football field at Loudoun Valley High School are currently off limits to the community.
5. For the section concerning adequate service by essential public facilities and services (Group 4, paragraph L) and the section concerning adequate infrastructure (Group 4, paragraph R), the provision of water and sewer utilities is not adequately addressed. There should be a complete description of these systems, the proposed operator, and, perhaps as part of the paragraphs addressing conformance with the comprehensive plan, a justification of the systems with regards to PUGAMP.
6. For the section concerning anticipated odors that may impact adjacent landowners (Group 4, paragraph S), it is possible that the septic drainfields could make an offensive odor. Have Health Department approvals of the three proposed uses of the drainfields been issued?

Traffic Impact Analysis

7. It would be helpful to have more information (projected hours of operation, projected number of buses servicing both schools, projected number of parking spaces for students and faculty, projected number of faculty and staff, etc.) about this proposal. We assume that the sports fields included on the HS-3 site will generate traffic during a significant number of evenings, but we do not see that in the traffic impact analysis. Information about the existing Mountain View Elementary School would also be helpful to

understand how the two schools' transportation activities will interact. For the same reason, information about the Loudoun County Parks and Recreation Services/Upper Loudoun Youth Football League facilities, including but not limited to the projected number of parking spaces, would be helpful.

8. Was Mountain View Elementary School included in the traffic impact analysis?
9. Were the Loudoun County Parks and Recreation Services/Upper Loudoun Youth Football League facilities included in the traffic impact analysis?
10. What assumptions were made for the proposed Harmony Elementary School? It would be helpful to see trip generation and trip assignments for this proposed school.
11. It would be helpful to show a graphic, similar to Figure 2a, depicting the existing lane designations and which of the study area intersections are signalized.
12. Have all trips associated with approved developments in the immediate vicinity that have not been built yet been included in the background traffic volumes?
13. Trip generation appears to be reasonable, but it might be helpful to supplement the ITE trip generation equations with local data from other Loudoun County high schools. This area's socioeconomic demographic is predominantly affluent and it would be expected that there would be more vehicles per household, which could result in a higher trip generation rate for students.
14. Was the number of proposed high school parking spaces factored into the proposed high school trip generation?
15. While the schedules for the elementary school and the proposed high school are proposed to be staggered there will likely be activity from the elementary school during the high school peak hours. This activity should be included in the traffic volumes at entrance onto Route 711.
16. It was not clear how the directional distribution assumptions were derived. It would be helpful to have a graphic showing where the school student population, separated by elementary school, middle school, and high school, is projected to be located.
17. It would be helpful to show a separate directional distribution for projected bus traffic. Are bus routes factored into total traffic? How about probable routes faculty and staff will take?
18. The 2008 total future conditions without improvements were not included in the capacity analyses. It would be helpful to see how the intersections are projected to operate without improvements.

19. What was the basis for the recommended intersection improvements for the projected background traffic volumes? What is the status of these improvements? Are any of them funded or planned by the County or the Town? Were these improvements discussed with the County or the Town? [Obviously, this comment is from our consultant. At Business Route 7 and Route 287, the Town's preferred improvement is a roundabout, for which we have a conceptual design. The Town does not propose to fund this roundabout, or any other listed improvement, except for traffic signals at Business Route 7 and Hatcher Avenue and at Business Route 7 and 23rd Street.]
20. It is unclear if the recommended intersection improvements with the build-out of the high school are being offered to be constructed with the school.
21. It would be helpful to show a graphic depicting the proposed intersection improvements, both for the background and total future conditions.
22. Our review did not examine the proposed improvements in detail due to our questions about trip generation and trip assignment. We can provide this review once the assumptions and methodology items have been addressed. [Again, this is from our consultant.]
23. The Highway Capacity Manual (HCM) signalized and unsignalized reports were not used in the Synchro analyses; instead the intersection capacity utilization methodology reports were used. The HCM reports tend to have slightly more conservative results for delays and levels of service.
24. What assumptions were made for the traffic analyses? Were peak hour factors utilized? Were percent heavy vehicles adjusted for turning movements along the projected bus route? Were the existing traffic signal timing/phasing used?
25. Will the existing eastbound Route 711 right turn lane have enough storage length to accommodate the proposed high school traffic? How much storage should the recommended westbound Route 711 left turn lane provide? A queue analysis would be helpful to determine these lengths.
26. Will the existing single egress lane from the Mountain View Elementary School adequately accommodate the both the elementary school and the proposed high school traffic? Has any consideration been given to providing an additional turn lane at the driveway and/or additional access points? It would be helpful to have additional access points for special events such as emergencies or evening school events (football games, graduation, etc.).

Environmental Resources

27. How will stormwater runoff be managed?

28. Has the impact on existing wetlands been assessed? Is the floodplain crossing properly addressed with both the U.S. Army Corps of Engineers and with Zoning Ordinance requirements?
29. Please provide Health Department approvals for the three proposed uses of the drainfields, including Mountain View Elementary School, the ULYFL/LCPRS recreation facility, and HS-3.

Historical Resources

30. Have the existing farm structures proposed to be demolished been surveyed for historical significance? We note that it appears that grading for the proposed stream crossing will destroy the stone springhouse and that HS-3 and its parking lot is proposed over the farmstead.

These comments reflect the application provided for the Town's review at this time. Further comments may be forthcoming when additional information and/or a revised application is submitted.

Purcellville Urban Growth Area Management Plan Existing and Proposed School Locations

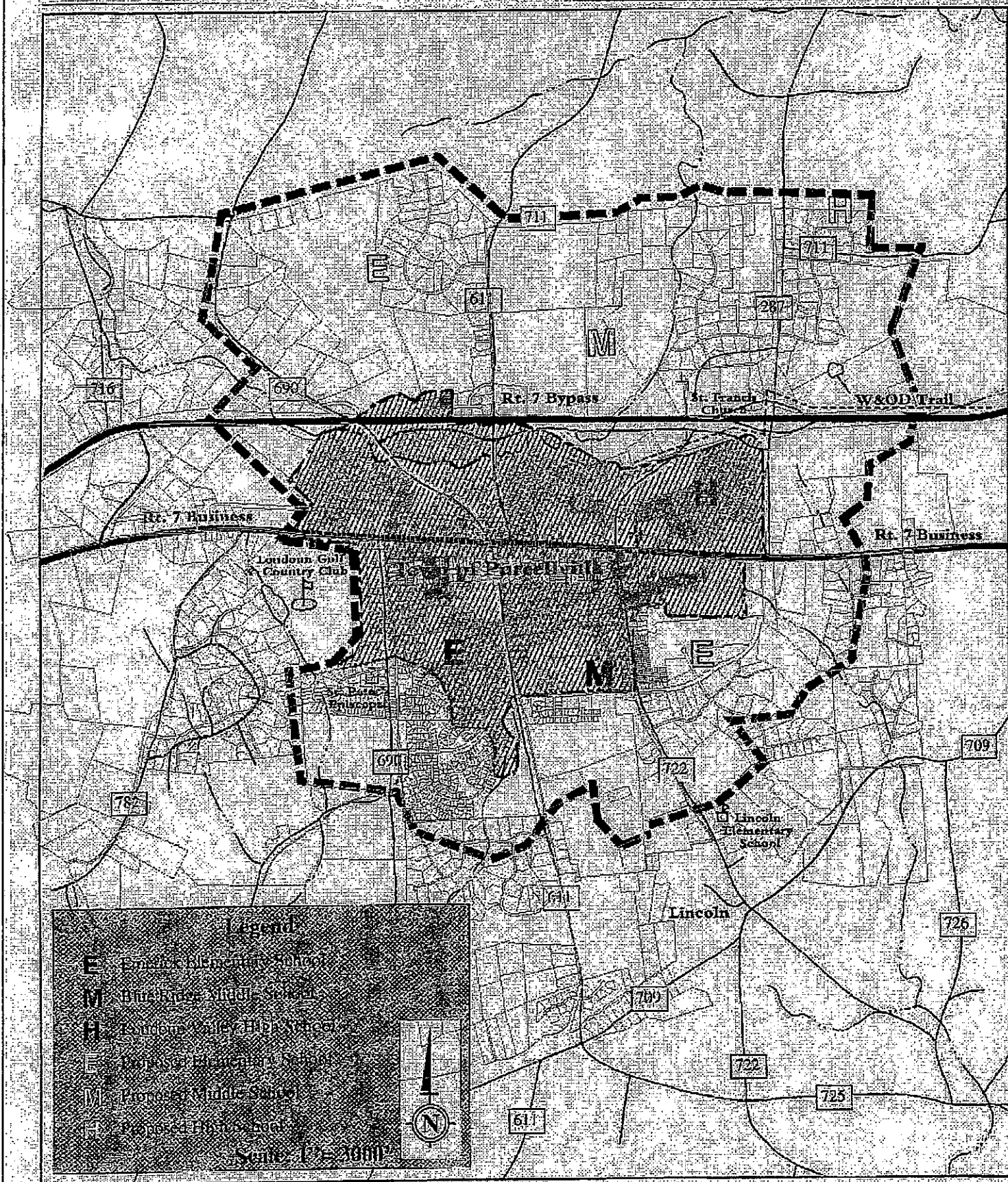


Figure 10

Disclosure of Real Parties In Interest

A. DIRECTIONS:

1. All applicants for Zoning Map Amendment Petitions, Special Exceptions, and Variances shall complete Section B of this form entitled "*Mandatory Disclosures*".
2. All applicants for Zoning Map Amendment Petitions, Special Exceptions, and Variances are requested, but not required, to complete Section C of this form entitled "*Voluntary Disclosures*". No application will be rejected for applicant's failure to complete Section C.
3. All applicants for Zoning Map Amendment Petitions, Special Exceptions, and Variances are required to keep the required information under Section B.1. current at all times during the processing of the application.
4. If additional space is needed to complete this form, the applicant may attach a separate sheet of paper to the back of this form.

B. MANDATORY DISCLOSURES:

1. Names and Addresses of Real Parties in Interest

The following constitutes a listing of names and addresses of all real parties in interest
** in the real estate which is the subject of this application, including the names and
addresses of all persons who hold a beneficial interest in the subject property:

NAME	ADDRESS
• <u>Loudoun County Board of Supervisors</u>	• <u>1 Harrison St. 5th Floor</u> <u>PO Box 7000</u> <u>Leesburg, VA 20177-7000</u>
• _____	• _____
• _____	• _____
• _____	• _____

****NOTE:** As used in this section "real parties in interest" shall include all sole or joint property owners, parties who have a legal interest in the protection of the property such as a trustee or executor, parties who have an equitable or beneficial interest in the property, such as beneficiaries of a trust, and, in the case of corporations, all stockholders, officers, and directors. The requirement of listing names of stockholders, officers, and directors shall not apply to a corporation whose stock is traded on a national or local stock exchange and having more than 500 shareholders.

2. Affidavit.

I, Sam Adamo, do hereby make oath or affirmation that to the best of my knowledge and belief, no member of the Loudoun County Board of Supervisors, Board of Zoning Appeals, or Planning Commission or any member of his immediate household and family, either individually, by ownership of stock in a corporation, or partnership, owns or has any interest in the property which is the subject of this application. Ownership interest in an entity of 3% or less shall not constitute an "interest" in property as used in this section.

EXCEPT AS FOLLOWS: (If none, so state).

WITNESS the following signature this 16th day of June 2006.

Sam Adamo
Applicant signature

The above affidavit was subscribed and confirmed by oath or affirmation before me this 16th day of June 2006 in the County of Loudoun, in the State of Virginia.

James Howard O'Brien
Notary Public

My Commission Expires: 10/31/08

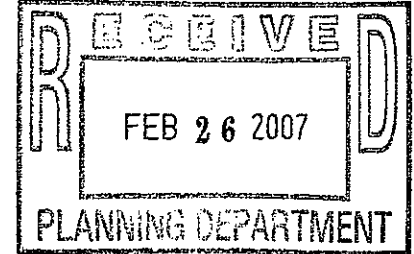
C. VOLUNTARY DISCLOSURE:

The following constitutes a listing of names and addresses of all real parties in interest in the real estate which is the subject of this application, including the names and addresses of all persons who hold a beneficial interest in the subject property, who have, within five years of the application date, contributed, by gift or donation, more than one hundred dollars to any current member of the Board of Supervisors.

NAME	ADDRESS
• _____	• _____
• _____	• _____
• _____	• _____

A-128

**Loudoun County Public Schools
Special Exception Statement of Justification
Western Loudoun County High School (HS-3)
Fields Farm Property
June 29, 2006
Updated December 12, 2006
Updated February 15, 2007**



PROPOSAL:

The Loudoun County Public Schools (LCPS) seeks approval of a special exception to allow a high school on the Fields Farm Property located on Route 711, Alder School Road, north of Purcellville and the Route 7 Bypass, between Route 690, Hillsboro Road, and Route 611, Purcellville Road. The 230.57 acre property is primarily zoned JLMA-3, Joint Land Management Area, 1 dwelling unit per 3 acres, (227.94 acres) and M-1, Limited Industrial (2.63 acres within the Town of Purcellville). The proposed high school is to be located on approximately 145.75 acres within the JLMA-3 District. School use is permitted in the JLMA-3 District subject to approval of a special exception.

The Fields Farm Property is owned by the Loudoun County Board of Supervisors and is located in the Joint Land Management Area (JLMA or Urban Growth Area) of the Town of Purcellville. Mountain View Elementary School is located in the northwest portion of the Fields Farm property. A Special Exception (SPEX 2004-0009) has also been approved to construct the Upper Loudoun Youth Football League Recreational Facilities on the southern portion of the property (south of the future collector road). The High school is proposed to be located on the remaining portion of the land. The high school will be approximately 260,000 square feet in size with a capacity design for 1600 students. There are additional facilities associated with the high school including the high school football stadium, concession stands, ticket booths, storage buildings, the field house, baseball dugout and various athletic fields. The desired opening is for the Fall of 2008.

SPECIAL EXCEPTION FACTORS FOR CONSIDERATION:

Section 6-1310 of the Zoning Ordinance outlines various factors for consideration in the review of a special exception request. The following is an analysis of these factors in relation to the Property:

(A) Whether the proposed special exception is consistent with the Comprehensive Plan.

The proposed high school use is consistent with the Comprehensive Plan and is a feature shown on the adopted plan. The Fields Farm property is located in the Joint Land Management Area of the Town of Purcellville and, as such, is guided by the policies of the Purcellville Urban Growth Area Management Plan (PUGAMP), 1995. Figure 10 in PUGAMP is an illustrative map that depicts the existing schools and the

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general vicinity in which proposed schools may be located within the Urban Growth Area. Figure 10 depicts a new high school north of the Town. The policies of PUGAMP recognize that there will be a need for additional schools and state that The Town of Purcellville will generally be the preferred location for new public facilities unless a suitable site is not available in the Town (Policy #2 under Public Facility and Services Polices). The text also recognizes the need to re-evaluate school needs and the preferred school locations. Since the adoption of PUGAMP, subdivisions have been built north of Route 7 in the general area where the symbol was depicted for the new high school. The general location depicted for the proposed high school within the Urban Growth Area supports the Fields Farm site; the policies recognize the school need and the potential to adjust the general location. In sum, the proposed high school at Fields Farm site is consistent with the general location shown in PUGAMP as well as the identified need of the PUGAMP policies.

PUGAMP also documents the historical role the Town of Purcellville has played as the cultural and commercial hub of the surrounding farm community. Because of its central location, Purcellville is the home to a variety of public facilities that serve the western Loudoun region, including schools. The proposed high school at the Fields Farm property will be centrally located to serve the western Loudoun student population and will fulfill the anticipated public service need identified in PUGAMP. It is noted that the County purchased the Fields Farm property in 2000 for the purpose of developing the 230 acre site with public facilities. The Fields Farm property is identified in the County's Revised General Plan (The RGP) as a public facility site. It is also noted that the Draft PUGAMP depicts the Fields Farm site as a location for public facilities.

PUGAMP recognizes the County's Comprehensive Plan policies for the overall strategy for natural resource management. The RGP provides guidelines for development in accord with Conservation Design, including four specific components of the Green Infrastructure that are to be considered in the context of development proposals.

Group One/Natural Resource Assets. The Existing Conditions Plan submitted with this application depicts the natural resource assets of this Property. There are limited moderate and very steep slopes situated on the southern portion of the Property, outside of the Special Exception area of the proposed high school. Minor floodplain exists on the northern portion of the site along Allder School Road and across the site just below the existing elementary school. The proposed high school facilities will be

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positioned on both sides of the floodplain with road and trail crossings as depicted on the Special Exception Plat. Wetlands have been mapped for the property and are generally situated within or along the floodplain. The wetlands information is included on the Existing Conditions Plan. A 50 foot floodplain conservation buffer has been provided in accord with recommended RGP policies. There is a minor encroachment into the 50 foot buffer with the wastewater treatment facility.

Because the Property had been farmed for many years, it is largely open fields with few tree areas situated along the exterior boundaries of the site. A letter from the Virginia Department of Conservation and Recreation states that no natural heritage resources have been documented in the project area. To ensure the absence of any rare and endangered species, an evaluation was conducted by Wetlands Studies and Solutions (WSSI). The June 19, 2006, report finds that no endangered or threatened species, rare plant species, or rare plant communities were observed and that there is low probability that any endangered or threatened species are present within the study area. A copy of the WSSI report is included with the application submission. The property is not adjacent to any scenic rivers, does not possess limestone conglomerate area or any known mineral resources. No adverse impact to groundwater is anticipated. (Also reference Item M)

The school facilities layout has been designed to minimize impacts to the natural resource areas of the site. Development will be accomplished in accord with the County regulations and development standards.

Group Two/Heritage Resource Assets. A Phase I Archeological Investigation was conducted on the Fields Farm by Thunderbird Archeology in June of 2006. The Phase I study identified Site 44LD1393 located in the central portion of the Fields Farm property within the boundaries of the previously identified Virginia Department of Historic Resources (VDHR) resource 053-5596 (the abandoned farm complex). The archeological site was concentrated in the vicinity of the two older buildings in the northern portion of 053-5596. Because the archaeological site had the potential to provide information related to the 19th century lifeways of rural western Loudoun County, a Phase II study was recommended.

On July 19, 2006, History Matters, LLC conducted a reconnaissance-level survey of the existing farm structures. This report was submitted to the Virginia Department of Historic Resources (DHR). Based on the survey, History Matters concluded that the farm complex no longer retains its physical integrity.

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VDHR reviewed the Phase I Investigation Report and the 2006 reconnaissance-level survey of the existing farm structures. VDHR recommended that Site 44LD1393 should either be avoided or subjected to a Phase II evaluation if avoidance is not feasible. With regard to the reconnaissance-level survey for the farm building complex VDHR concurred with the consultant's recommendation that the farm building deterioration render it unlikely that the resource would be considered eligible for inclusion in the National Register. No further investigation of the farm building complex was recommended.

In October of 2006, a Phase II Archaeological Evaluation was conducted on Site 44LD1393 by Thunderbird Archeology. The investigation found that almost all of the artifacts were recovered from disturbed contexts. The site is not considered to be eligible for listing on the National Register of Historic Places and no further archeological work is recommended.

Copies of the Phase I, Phase II, the 2006 reconnaissance –level survey of the existing farm structures and the VDHR letter of September 6, 2006 are submitted with the response to the first referral comments.

Group Three/Open Space Assets. The development of this Property for a high school will include substantial open space assets. The RGP recognizes public school sites as an element of the County's Green Infrastructure system. Facilities provided at the school site will afford active recreational opportunities for the community. In this particular situation, there will be significant co-located recreational facilities and opportunities on the Fields Farm with the existing elementary school, the planned ULYFL facilities and the proposed high school.

Group Four/Complementary Elements. Development will comply with the County's standards for air quality, light and noise. No adverse impacts are anticipated. The high school stadium has been positioned to setback from the property boundary to comply with lighting and noise standards and buffering will be provided in accord with County requirements. To the east of the Fields Farm property is an existing floodplain which provides a natural separation between the school recreational facilities and the residential properties. It is also proposed to enhance the buffering requirements to provide evergreen buffers east of the proposed stadium and the residential properties to the east and between the active recreation areas and the residential out parcel located on Route 711.

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Consistent with similarly situated school facilities, LCPS has provided a note on the Special Exception Plan which provides for:

Site building and parking lot lighting shall be designed and constructed with cut-off and fully shielded fixtures so that the light will be directed inward and downward toward the interior of the property, away from adjacent streets and properties. Parking lot lighting shall be turned off within one hour following evening activities and no later than 11 p.m. Athletic field lighting shall also be directed inward and downward toward the fields. Athletic field lighting will incorporate a reflector technology system that directs light onto the field, minimizes glare and spillage, and reduces energy and maintenance costs.

The public address system shall be limited to the stadium/track and the high school softball and baseball fields. The public address system shall not be used beyond 11 p.m.

In summary, the proposed high school site is consistent with the comprehensive plan policies and will meet a critical public service need. PUGAMP anticipates the need for additional schools, such as the proposed high school, in the Urban Growth Area.

(B) Whether the proposed special exception will adequately provide for safety from fire hazards and have effective measures of fire control.

The proposed school will be constructed to meet required building safety codes, including the provision of a sprinkler system. Fire protection services will be provided by the volunteer fire companies serving the area. Access to the school is proposed via Alder School Road, with a shared access with the existing elementary school. It is proposed to also have an alternate emergency access either from the existing driveway on Alder School Road or through the future ULYFL site.

(C) Whether the level and impact of any noise emanating from the site, including that generated by the proposed use, negatively impacts the uses in the immediate area.

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The primary noises associated with the school facility will be generated from the picking up and dropping off of students and from outside sports activities. The primary physical education (PE) fields are located to the south of the school between the drainfield area to the west and the reserve drainfield area to the east. All of the PE fields are separated from the adjacent residential areas by either drainfield area or by existing ponds. The stadium and additional softball/baseball and soccer fields are located on the northern portion of the site between the elementary school to the west and the (off site) existing floodplain to the east. The closest residential home is situated along Alder School Road to the north and west of the athletic fields. An enhanced evergreen buffer is proposed along the boundaries to this existing home and along the eastern property boundary to the east of the proposed stadium.

(D) Whether the glare or light that may be generated by the proposed use negatively impacts uses in the immediate area.

Lighting of the school facilities is accomplished to provide visibility in the parking lot and around the immediate school building for safety and security purposes. The high school softball and baseball playing fields as well as the stadium will be lighted. As noted previously, building lights will be cutoff and fully shielded lighting fixtures, directed inward and downward toward the interior of the property. The lighted playing fields and stadium will be positioned and buffered to ensure lighting will not adversely impact surrounding properties. In addition, the athletic field lighting will incorporate a reflector technology system that directs light onto the field, minimizes glare and spillage, and reduces energy and maintenance costs.

(E) Whether the proposed use is compatible with other existing or proposed uses in the neighborhood, and adjacent parcels.

The subject property is presently utilized for school purposes and is approved for a recreational facility. The addition of the high school is a logical extension of these existing community public service uses. The area surrounding the Fields Farm property is in large lot residential use. The layout of the site coupled with existing natural features will ensure compatibility with the surrounding uses. In addition to the existing natural features and the proposed site layout, the proposed special exception plan complies with the zoning development standards including landscape buffers along all special exception boundaries. It is proposed to

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enhance the buffering requirements to provide evergreen buffers east of the proposed stadium to buffer the residential properties to the east and between the active recreation areas and the residential out parcel located on Route 711. More specifically, the required Type II landscape buffer (2 canopy trees, 3 understory trees, and 8 shrubs per 100 linear feet) will be enhanced with a 15 foot evergreen tree buffer (6 trees per 100 linear feet, trees to be 6-8 feet in height at planting) to provide a buffer that is a total of 30 feet in width. The stadium is provided with an increased setback and is further separated from properties to the east by the existing off-site floodplain. Lighting for the property will also be designed to minimize any impact to adjacent properties. School facilities are traditionally constructed in residential areas because they serve residential communities and are considered to be a compatible use.

(F) **Whether sufficient existing or proposed landscaping, screening and buffering on the site and in the neighborhood will adequately screen surrounding uses.**

A Type 2 buffer will be provided along the Special Exception boundaries. In addition, an evergreen buffer is proposed east of the stadium (between the stadium and the residential properties to the east) and along the side and rear boundaries of the residential out-parcel that is situated on Route 711. Please reference the accompanying Special Exception Plat and Item E above.

(G) **Whether the proposed special exception will result in the preservation of any topographic or physical, natural, scenic, archaeological, or historic feature of significant importance.**

The natural features of the site will be altered as a result of school site construction. The layout has taken into consideration the natural features including the minor floodplain and wetland areas. The RGP recommended 50 foot floodplain conservation buffer has been provided. Phase I and Phase II archaeological studies have been conducted on the property. There are no resources that are considered to be eligible for listing on the National Register of Historic Places and no further archeological work is recommended.

(H) **Whether the proposed special exception will damage existing animal habitat, vegetation, water quality (including groundwater) or air quality.**

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No adverse impacts to environmentally sensitive land, rare or endangered plant/animal species habitat, and water or air quality are anticipated. Review by the State Department of Conservation and Recreation found no documented natural heritage resources in the project area and the rare and endangered species survey conducted on the property found no species and low probability for occurrence.

(I) **Whether the proposed special exception at the specified location will contribute to or promote the welfare or convenience of the public.**

The proposed high school at the specified location will contribute to the welfare and convenience of the public. The proposed school will serve a large area of Western Loudoun; however, the majority of the student population is situated along the Route 7 corridor. Placing the school at Fields Farm will provide for a convenient location to the student population. Its proximity to Harmony Intermediate will also afford a good transportation service between the schools.

(J) **Whether the traffic expected to be generated by the proposed use will be adequately and safely served by roads, pedestrian connections and other transportation services.**

A detailed traffic analysis has been prepared for the proposed 1600 student capacity high school. The traffic study scoping was established in conjunction with the Loudoun County Office of Transportation and the Town of Purcellville. The study analyzed the existing and projected future traffic conditions, specifically for 19 intersections within the study area. The proposed school is to be located on Alder School Road, east of Route 690 and will share an entrance with Mountain View Elementary School. Given the start and end times for the elementary and high school, the traffic flows for the schools will not overlap. The school bus route from Harmony Intermediate will be via Route 7 at the middle school to Route 287 north, to Hirst Drive west, to Route 611 north, to Alder School Road west, and into the school entrance.

It is projected that the use will generate 2,736 average daily trips with entry and exit peak flows of 452/204 for the A.M. and 143/305 for the P.M. The peak a.m. and peak p.m. hours for the school use are off set from commuter peak hours. The study recommends road improvements within the study area for both school related and non-school related traffic (Reference pages 19-20 of the Traffic

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Analysis dated May 30, 2006.) For the school related traffic, the study recommends improvements to five intersections. Improvements for eight additional intersections are recommended to meet the needs of existing and/or background traffic. The latter improvements are considered to be necessary with or without the school. Preliminary design for the school related improvements is underway. Loudoun County Public Schools will work with the County to determine the appropriate implementation and funding for the recommended school related improvements. Safe and adequate access can be provided to the proposed high school. The following is an outline of the proposed phasing:

Provide prior to occupancy:

- ▶ Alder School Road and HS Entrance: WB left turn lane
- ▶ Route 611 and Alder School Road: EB Right turn lane
- ▶ Route 690 and Alder School Road: Roundabout
- ▶ Route 690 and Route 9: Contribute fair share to future Roundabout (\$97,500.00)
- ▶ Regional road contribution of \$136,407.00

Provide a year after occupancy:

- ▶ Hirst Drive and Hatcher Avenue: SB left turn lane and WB right turn lane
- ▶ Hirst Drive and Maple Avenue: NB right turn lane, EB right turn lane, and WB left turn lane

A pedestrian plan has been added to the Special Exception Plat. This plan illustrates the proposed internal pedestrian network and depicts the connection to the Upper Loudoun Youth Football League (ULYFL) pedestrian system. Ultimately, the ULYFL pedestrian ways connect to the Town's sidewalk system.

School bus service will, of course, be provided to the school. The existing western Loudoun Valley High School is presently served by approximately 80 buses. With the pairing of middle and high schools and the additional of this (HS-3) high school at Fields Farm, it is projected that the new school will be served by approximately 40 buses. Essentially, the western Loudoun student population will be split between the two high school facilities.

Please reference the traffic study for additional details.

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- (K) Whether, in the case of existing structures proposed to be converted to uses requiring a special exception, the structures meet all code requirements of Loudoun County.

It is proposed to remove the existing structures. It is anticipated that the use will not generate any offensive odors.

- (L) Whether the proposed special exception will be served adequately by essential public facilities and services.

Police protection and fire and rescue service will be provided through the County and the volunteer fire and rescue companies.

- (M) The effect of the proposed special exception on groundwater supply.

As a part of development, good engineering practices will be implemented. No adverse impact to groundwater supply is anticipated. A Preliminary Hydrogeologic Evaluation has been prepared for the Fields Property by Triad Engineering, Inc. This September 8, 2006, report provides an assessment of the site's groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity.

A water budget was developed for the site by comparing the anticipated annual groundwater withdrawal to an estimated annual groundwater recharge. The water demand at the site is the combination of the existing elementary school demand, the proposed high school usage, the proposed ULYFL demand and the proposed irrigation for sports fields. Relative to groundwater recharge, the budget is conservative assuming only groundwater recharge via precipitation that falls on the site. The budget does not take into account potential off-site groundwater recharge to the site and ignores groundwater recharge via the existing and proposed on-site septic systems and sports field irrigation. The anticipated annual water usage at the site is estimated at 7.1 million gallons per year. The estimated median and drought condition annual recharge to the site is 32 million gallons per year and 20.8 million gallons per year respectively. As such the water recharge is

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in excess of water extraction, even conducted conservatively and even in years of severe drought. (Pages 8-9 of the Hydrogeological Evaluation)

Phase I and II Environmental Site Assessments were completed for the site by Earth Tech in June and September of 2000. Triad completed an updated Phase I dated July 24, 2006. Identified site conditions of concern have been addressed. Existing septic systems (2) and a pit privy associated with the on-site residences will be properly abandoned in accord with Health Department requirements. The Health Department has issued the necessary permits for the abandonment of the existing wastewater systems and wells (that served the farm house). These permits were issued on November 8th and 9th.
(Pages 15-16)

The Preliminary Hydrogeologic Evaluation states that high yield wells are feasible at the site. (Page 13) Drilling was conducted on the site on November 22, 2006. In order to evaluate the potential impacts of proposed groundwater extraction to the existing Elementary School water supply, nearby domestic groundwater users, the site spring and nearby surface water bodies that receive groundwater discharge, groundwater drawdown and recovery tests were conducted on January 5-7, 2007 as required by the County and State Health Departments. The results found that there is an adequate water supply for the proposed use. The Detailed Hydrogeologic Report is expected in February.

(N) **Whether the proposed use will affect the structural capacity of the soils.**

Soil analysis and construction in compliance with the findings and recommendations of the soils investigation required at site plan stage will ensure that adequate structural capacity is maintained for the proposed use.

(O) **Whether the proposed use will negatively impact orderly and safe road development and transportation.**

Safe road access will be available to the proposed school site. Please reference (J) above and the traffic analysis provided as a part of this application submission.

(P) **Whether the proposed special exception use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan.**

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The availability of an excellent education system and adequate facilities will promote the location of businesses to Loudoun County, thereby positively influencing employment opportunities and economic activity. In addition, the high school will provide approximately 200 jobs.

(Q) Whether the proposed special exception considers the needs of agriculture, industry, and businesses in future growth.

Reference (P) above.

(R) Whether adequate on and off-site infrastructure is available.

Adequate infrastructure is available to serve the proposed school use. On site water and waste water facilities will be constructed to serve the use. On August 11, 2006, a "Basis of Design Report" prepared by Bury + Partners was filed with the Loudoun County Sanitation Authority (LCSA). The purpose of the report was to provide information on the proposed wastewater treatment and subsurface disposal system that is to serve the proposed Field's Farm High School.

On November 1, 2006, the Preliminary Engineering Report prepared by Bury + Partners was submitted to LCSA and the Loudoun County Health Department. It is projected that the Final Engineering Plans and Specifications for the proposed wastewater treatment and subsurface disposal system will be filed in February.

A Preliminary Hydrogeologic Evaluation prepared by Triad was filed with the Health Department on September 8, 2006. This report provides an assessment of the site's groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity. The Preliminary Hydrogeologic Evaluation states that high yield wells are feasible at the site. Drilling of a well on the property in late November confirmed the availability of a high yield. Drawdown tests have been completed and the Detailed Hydrogeological Report is expected in February.

Other utilities such as electricity and phone are presently on site. The area roadway system will provide good access.

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- (S) Any anticipated odors which may be generated by the uses on site and which may negatively impact adjacent uses.

Not applicable.

- (T) Whether the proposed special exception uses sufficient measure to mitigate the impact of construction traffic on existing neighborhoods and school areas.

The Fields Farm property has access from Alder School Road via route 690 and Route 611. Construction traffic would travel on these roadways and not go through interior neighborhood streets. The residential properties in the area are typically large lot and for the most part, homes sit back from the road. The project would adhere to all regulations set forth in the Virginia Erosion and Sediment Control Handbook with special attention to be given to regulation VR625-02-00, minimum standard 17 relating to keeping public roads clean (keeping dirt and tracking off the roads). Loudoun County Public Schools will work with our contractors to minimize heavy construction traffic during peak traffic periods and request that significant deliveries arrive prior to or after the peak school bus routing times. The zoning staff has recommended that a separate construction entrance be utilized for the high school construction. LCPS is willing to pursue a temporary construction entrance at the existing driveway to the east of the Dowling property. However, should VDOT require the installation of turn lanes at this location LCPS may need to utilize the existing entrance. In addition, there are certain vehicles that will necessitate a wider turning radius and those will need to use the existing, wider entrance.

PHASING PLAN:

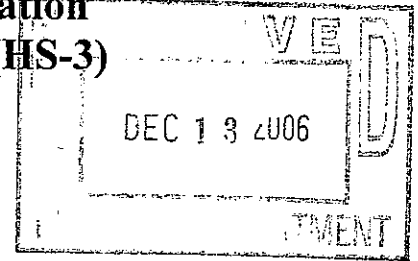
The proposed high school and associated facilities are projected for a Fall 2008 opening.

SUMMARY:

The proposed use complies with the JLMA-3 Zoning District standards, is consistent with the policies of the comprehensive plan and is compatible with the surrounding land uses. Favorable consideration of this special exception is respectfully requested.

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Loudoun County Public Schools
Special Exception Statement of Justification
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PROPOSAL:

The Loudoun County Public Schools (LCPS) seeks approval of a special exception to allow a high school on the Fields Farm Property located on Route 711, Allder School Road, north of Purcellville and the Route 7 Bypass, between Route 690, Hillsboro Road, and Route 611, Purcellville Road. The 230.57 acre property is primarily zoned JLMA-3, Joint Land Management Area, 1 dwelling unit per 3 acres, (227.94 acres) and M-1, Limited Industrial (2.63 acres within the Town of Purcellville). The proposed high school is to be located on approximately 145.75 acres within the JLMA-3 District. School use is permitted in the JLMA-3 District subject to approval of a special exception.

The Fields Farm Property is owned by the Loudoun County Board of Supervisors and is located in the Joint Land Management Area (JLMA or Urban Growth Area) of the Town of Purcellville. Mountain View Elementary School is located in the northwest portion of the Fields Farm property. A Special Exception (SPEX 2004-0009) has also been approved to construct the Upper Loudoun Youth Football League Recreational Facilities on the southern portion of the property (south of the future collector road). The High school is proposed to be located on the remaining portion of the land. The high school will be approximately 260,000 square feet in size with a capacity design for 1600 students. There are additional facilities associated with the high school including the high school football stadium, concession stands, ticket booths, storage buildings, the field house, baseball dugout and various athletic fields. The desired opening is for the Fall of 2008.

SPECIAL EXCEPTION FACTORS FOR CONSIDERATION:

Section 6-1310 of the Zoning Ordinance outlines various factors for consideration in the review of a special exception request. The following is an analysis of these factors in relation to the Property:

(A) Whether the proposed special exception is consistent with the Comprehensive Plan.

The proposed high school use is consistent with the Comprehensive Plan and is a feature shown on the adopted plan. The Fields Farm property is located in the Joint Land Management Area of the Town of Purcellville and, as such, is guided by the policies of the Purcellville Urban Growth Area Management Plan (PUGAMP), 1995. Figure 10 in PUGAMP is an illustrative map that depicts the existing schools and the general vicinity in which proposed schools may be located within the Urban Growth Area. Figure 10 depicts a new high school north of the Town. The policies of

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PUGAMP recognize that there will be a need for additional schools and state that The Town of Purcellville will generally be the preferred location for new public facilities unless a suitable site is not available in the Town (Policy #2 under Public Facility and Services Policies). The text also recognizes the need to re-evaluate school needs and the preferred school locations. Since the adoption of PUGAMP, subdivisions have been built north of Route 7 in the general area where the symbol was depicted for the new high school. The general location depicted for the proposed high school within the Urban Growth Area supports the Fields Farm site; the policies recognize the school need and the potential to adjust the general location. In sum, the proposed high school at Fields Farm site is consistent with the general location shown in PUGAMP as well as the identified need of the PUGAMP policies.

PUGAMP also documents the historical role the Town of Purcellville has played as the cultural and commercial hub of the surrounding farm community. Because of its central location, Purcellville is the home to a variety of public facilities that serve the western Loudoun region, including schools. The proposed high school at the Fields Farm property will be centrally located to serve the western Loudoun student population and will fulfill the anticipated public service need identified in PUGAMP. It is noted that the County purchased the Fields Farm property in 2000 for the purpose of developing the 230 acre site with public facilities. The Fields Farm property is identified in the County's Revised General Plan (The RGP) as a public facility site. It is also noted that the Draft PUGAMP depicts the Fields Farm site as a location for public facilities.

PUGAMP recognizes the County's Comprehensive Plan policies for the overall strategy for natural resource management. The RGP provides guidelines for development in accord with Conservation Design, including four specific components of the Green Infrastructure that are to be considered in the context of development proposals.

Group One/Natural Resource Assets. The Existing Conditions Plan submitted with this application depicts the natural resource assets of this Property. There are limited moderate and very steep slopes situated on the southern portion of the Property, outside of the Special Exception area of the proposed high school. Minor floodplain exists on the northern portion of the site along Alder School Road and across the site just below the existing elementary school. The proposed high school facilities will be positioned on both sides of the floodplain with road and trail crossings as depicted on the Special Exception Plat. Wetlands have been mapped for the property and are generally situated within or along the floodplain. The wetlands information is

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included on the Existing Conditions Plan. A 50 foot floodplain conservation buffer has been provided in accord with recommended RGP policies.

Because the Property had been farmed for many years, it is largely open fields with few tree areas situated along the exterior boundaries of the site. A letter from the Virginia Department of Conservation and Recreation states that no natural heritage resources have been documented in the project area. To ensure the absence of any rare and endangered species, an evaluation was conducted by Wetlands Studies and Solutions (WSSI). The June 19, 2006, report finds that no endangered or threatened species, rare plant species, or rare plant communities were observed and that there is low probability that any endangered or threatened species are present within the study area. A copy of the WSSI report is included with the application submission. The property is not adjacent to any scenic rivers, does not possess limestone conglomerate area or any known mineral resources. No adverse impact to groundwater is anticipated.

The school facilities layout has been designed to minimize impacts to the natural resource areas of the site. Development will be accomplished in accord with the County regulations and development standards.

Group Two/Heritage Resource Assets. A Phase I Archeological Investigation was conducted on the Fields Farm by Thunderbird Archeology in June of 2006. The Phase I study identified Site 44LD1393 located in the central portion of the Fields Farm property within the boundaries of the previously identified Virginia Department of Historic Resources (VDHR) resource 053-5596 (the abandoned farm complex). The archeological site was concentrated in the vicinity of the two older buildings in the northern portion of 053-5596. Because the archaeological site had the potential to provide information related to the 19th century lifeways of rural western Loudoun County, a Phase II study was recommended.

On July 19, 2006, History Matters, LLC conducted a reconnaissance-level survey of the existing farm structures. This report was submitted to the Virginia Department of Historic Resources (DHR). Based on the survey, History Matters concluded that the farm complex no longer retains its physical integrity.

VDHR reviewed the Phase I Investigation Report and the 2006 reconnaissance-level survey of the existing farm structures. VDHR recommended that Site 44LD1393 should either be avoided or subjected to a Phase II evaluation if avoidance is not feasible. With regard to the reconnaissance-level survey for the farm building

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complex VDHR concurred with the consultant's recommendation that the farm building deterioration render it unlikely that the resource would be considered eligible for inclusion in the National Register. No further investigation of the farm building complex was recommended.

In October of 2006, a Phase II Archaeological Evaluation was conducted on Site 44LD1393 by Thunderbird Archeology. The investigation found that almost all of the artifacts were recovered from disturbed contexts. The site is not considered to be eligible for listing on the National Register of Historic Places and no further archeological work is recommended.

Copies of the Phase I, Phase II, the 2006 reconnaissance –level survey of the existing farm structures and the VDHR letter of September 6, 2006 are submitted with the response to the first referral comments.

Group Three/Open Space Assets. The development of this Property for a high school will include substantial open space assets. The RGP recognizes public school sites as an element of the County's Green Infrastructure system. Facilities provided at the school site will afford active recreational opportunities for the community. In this particular situation, there will be significant co-located recreational facilities and opportunities on the Fields Farm with the existing elementary school, the planned ULYFL facilities and the proposed high school.

Group Four/Complementary Elements. Development will comply with the County's standards for air quality, light and noise. No adverse impacts are anticipated. The high school stadium has been positioned to setback from the property boundary to comply with lighting and noise standards and buffering will be provided in accord with County requirements. To the east of the Fields Farm property is an existing floodplain which provides a natural separation between the school recreational facilities and the residential properties. It is also proposed to enhance the buffering requirements to provide evergreen buffers east of the proposed stadium and the residential properties to the east and between the active recreation areas and the residential out parcel located on Route 711.

Consistent with similarly situated school facilities, LCPS has provided a note on the Special Exception Plan which provides for:

Site building and parking lot lighting shall be designed and constructed with cut-off and fully shielded fixtures so that the light will be directed inward and downward

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toward the interior of the property, away from adjacent streets and properties. Parking lot lighting shall be turned off within one hour following evening activities and no later than 12 a.m. Athletic field lighting shall also be directed inward and downward toward the fields. Athletic field lighting will incorporate a reflector technology system that directs light onto the field, minimizes glare and spillage, and reduces energy and maintenance costs.

The public address system shall be limited to the stadium/track and the high school softball and baseball fields. The public address system shall not be used beyond 11 a.m.

In summary, the proposed high school site is consistent with the comprehensive plan policies and will meet a critical public service need. PUGAMP anticipates the need for additional schools, such as the proposed high school, in the Urban Growth Area.

(B) **Whether the proposed special exception will adequately provide for safety from fire hazards and have effective measures of fire control.**

The proposed school will be constructed to meet required building safety codes, including the provision of a sprinkler system. Fire protection services will be provided by the volunteer fire companies serving the area. Access to the school is proposed via Allder School Road, with a shared access with the existing elementary school. It is proposed to also have an alternate emergency access either from the existing driveway on Allder School Road or through the future ULYFL site.

(C) **Whether the level and impact of any noise emanating from the site, including that generated by the proposed use, negatively impacts the uses in the immediate area.**

The primary noises associated with the school facility will be generated from the picking up and dropping off of students and from outside sports activities. The primary physical education (PE) fields are located to the south of the school between the drainfield area to the west and the reserve drainfield area to the east. All of the PE fields are separated from the adjacent residential areas by either drainfield area or by existing ponds. The stadium and additional softball/baseball and soccer fields are located on the northern portion of the site between the

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elementary school to the west and the (off site) existing floodplain to the east. The closest residential home is situated along Alder School Road to the north and west of the athletic fields. An enhanced evergreen buffer is proposed along the boundaries to this existing home and along the eastern property boundary to the east of the proposed stadium.

(D) Whether the glare or light that may be generated by the proposed use negatively impacts uses in the immediate area.

Lighting of the school facilities is accomplished to provide visibility in the parking lot and around the immediate school building for safety and security purposes. The high school softball and baseball playing fields as well as the stadium will be lighted. As noted previously, building lights will be cutoff and fully shielded lighting fixtures, directed inward and downward toward the interior of the property. The lighted playing fields and stadium will be positioned and buffered to ensure lighting will not adversely impact surrounding properties. In addition, the athletic field lighting will incorporate a reflector technology system that directs light onto the field, minimizes glare and spillage, and reduces energy and maintenance costs.

(E) Whether the proposed use is compatible with other existing or proposed uses in the neighborhood, and adjacent parcels.

The subject property is presently utilized for school purposes and is approved for a recreational facility. The addition of the high school is a logical extension of these existing community public service uses. The area surrounding the Fields Farm property is in large lot residential use. The layout of the site coupled with existing natural features will ensure compatibility with the surrounding uses. In addition to the existing natural features and the proposed site layout, the proposed special exception plan complies with the zoning development standards including landscape buffers along all special exception boundaries. It is proposed to enhance the buffering requirements to provide evergreen buffers east of the proposed stadium and the residential properties to the east and between the active recreation areas and the residential out parcel located on Route 711. The stadium is provided with an increased setback and is further separated from properties to the east by the existing off-site floodplain. Lighting for the property will also be designed to minimize any impact to adjacent properties. School facilities are traditionally constructed in residential areas because they serve residential communities and are considered to be a compatible use.

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(F) **Whether sufficient existing or proposed landscaping, screening and buffering on the site and in the neighborhood will adequately screen surrounding uses.**

A Type 2 buffer will be provided along the Special Exception boundaries. In addition, an evergreen buffer is proposed east of the stadium (between the stadium and the residential properties to the east) and along the side and rear boundaries of the residential out-parcel that is situated on Route 711. Please reference the accompanying Special Exception Plat.

(G) **Whether the proposed special exception will result in the preservation of any topographic or physical, natural, scenic, archaeological, or historic feature of significant importance.**

The natural features of the site will be altered as a result of school site construction. The layout has taken into consideration the natural features including the minor floodplain and wetland areas. The RGP recommended 50 foot floodplain conservation buffer has been provided. Phase I and Phase II archaeological studies have been conducted on the property. There are no resources that are considered to be eligible for listing on the National Register of Historic Places and no further archeological work is recommended.

(H) **Whether the proposed special exception will damage existing animal habitat, vegetation, water quality (including groundwater) or air quality.**

No adverse impacts to environmentally sensitive land, rare or endangered plant/animal species habitat, and water or air quality are anticipated. Review by the State Department of Conservation and Recreation found no documented natural heritage resources in the project area and the rare and endangered species survey conducted on the property found no species and low probability for occurrence.

(I) **Whether the proposed special exception at the specified location will contribute to or promote the welfare or convenience of the public.**

The proposed high school at the specified location will contribute to the welfare and convenience of the public. The proposed school will serve a large area of Western Loudoun; however, the majority of the student population is situated along the Route 7 corridor. Placing the school at Fields Farm will provide for a

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convenient location to the student population. Its proximity to Harmony Intermediate will also afford a good transportation service between the schools.

(J) **Whether the traffic expected to be generated by the proposed use will be adequately and safely served by roads, pedestrian connections and other transportation services.**

A detailed traffic analysis has been prepared for the proposed 1600 student capacity high school. The traffic study scoping was established in conjunction with the Loudoun County Office of Transportation and the Town of Purcellville. The study analyzed the existing and projected future traffic conditions, specifically for 19 intersections within the study area. The proposed school is to be located on Allder School Road, east of Route 690 and will share an entrance with Mountain View Elementary School. Given the start and end times for the elementary and high school, the traffic flows for the schools will not overlap. The school bus route from Harmony Intermediate will be via Route 7 at the middle school to Route 287 north, to Hirst Drive west, to Route 611 north, to Allder School Road west, and into the school entrance.

It is projected that the use will generate 2,736 average daily trips with entry and exit peak flows of 452/204 for the A.M. and 143/305 for the P.M. The peak a.m. and peak p.m. hours for the school use are off set from commuter peak hours. The study recommends road improvements within the study area for both school related and non-school related traffic (Reference pages 19-20 of the Traffic Analysis dated May 30, 2006.) For the school related traffic, the study recommends improvements to five intersections. Improvements for eight additional intersections are recommended to meet the needs of existing and/or background traffic. The latter improvements are considered to be necessary with or without the school. Preliminary design for the school related improvements is underway. Loudoun County Public Schools will work with the County to determine the appropriate implementation and funding for the recommended school related improvements. Safe and adequate access can be provided to the proposed high school.

A pedestrian plan has been added to the Special Exception Plat. This plan illustrates the proposed internal pedestrian network and depicts the connection to the Upper Loudoun Youth Football League (ULYFL) pedestrian system. Ultimately, the ULYFL pedestrian ways connect to the Town's sidewalk system.

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School bus service will, of course, be provided to the school. The existing western Loudoun Valley High School is presently served by approximately 80 buses. With the pairing of middle and high schools and the additional of this (HS-3) high school at Fields Farm, it is projected that the new school will be served by approximately 40 buses. Essentially, the western Loudoun student population will be split between the two high school facilities.

Please reference the traffic study for additional details.

- (K) **Whether, in the case of existing structures proposed to be converted to uses requiring a special exception, the structures meet all code requirements of Loudoun County.**

It is proposed to remove the existing structures. It is anticipated that the use will not generate any offensive odors.

- (L) **Whether the proposed special exception will be served adequately by essential public facilities and services.**

Police protection and fire and rescue service will be provided through the County and the volunteer fire and rescue companies.

- (M) **The effect of the proposed special exception on groundwater supply.**

As a part of development, good engineering practices will be implemented. No adverse impact to groundwater supply is anticipated. A Preliminary Hydrogeologic Evaluation has been prepared for the Fields Property by Triad Engineering, Inc. This September 8, 2006, report provides an assessment of the site's groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity.

A water budget was developed for the site by comparing the anticipated annual groundwater withdrawal to an estimated annual groundwater recharge. The water demand at the site is the combination of the existing elementary school demand, the proposed high school usage, the proposed ULYFL demand and the proposed irrigation for sports fields. Relative to groundwater recharge, the budget is

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conservative assuming only groundwater recharge via precipitation that falls on the site. The budget does not take into account potential off-site groundwater recharge to the site and ignores groundwater recharge via the existing and proposed on-site septic systems and sports field irrigation. The anticipated annual water usage at the site is estimated at 7.1 million gallons per year. The estimated median and drought condition annual recharge to the site is 32 million gallons per year and 20.8 million gallons per year respectively. As such the water recharge is in excess of water extraction, even conducted conservatively and even in years of severe drought. (Pages 8-9 of the Hydrogeological Evaluation)

Phase I and II Environmental Site Assessments were completed for the site by Earth Tech in June and September of 2000. Triad completed an updated Phase I dated July 24, 2006. Identified site conditions of concern have been addressed. Existing septic systems (2) and a pit privy associated with the on-site residences will be properly abandoned in accord with Health Department requirements. The Health Department has issued the necessary permits for the abandonment of the existing wastewater systems and wells (that served the farm house). These permits were issued on November 8th and 9th.
(Pages 15-16)

The Preliminary Hydrogeologic Evaluation states that high yield wells are feasible at the site. (Page 13) Drilling is scheduled to begin in mid-November. In order to evaluate the potential impacts of proposed groundwater extraction to the existing Elementary School water supply, nearby domestic groundwater users, the site spring and nearby surface water bodies that receive groundwater discharge, groundwater drawdown and recovery tests will be conducted on any potential supply well as required by the County and State Health Departments. These tests are projected to occur in late December/early January. (Page 16)

(N) **Whether the proposed use will affect the structural capacity of the soils.**

Soil analysis and construction in compliance with the findings and recommendations of the soils investigation required at site plan stage will ensure that adequate structural capacity is maintained for the proposed use.

(O) **Whether the proposed use will negatively impact orderly and safe road development and transportation.**

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Safe road access will be available to the proposed school site. Please reference (J) above and the traffic analysis provided as a part of this application submission.

- (P) **Whether the proposed special exception use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan.**

The availability of an excellent education system and adequate facilities will promote the location of businesses to Loudoun County, thereby positively influencing employment opportunities and economic activity. In addition, the high school will provide approximately 200 jobs.

- (Q) **Whether the proposed special exception considers the needs of agriculture, industry, and businesses in future growth.**

Reference (P) above.

- (R) **Whether adequate on and off-site infrastructure is available.**

Adequate infrastructure is available to serve the proposed school use. On site water and waste water facilities will be constructed to serve the use. On August 11, 2006, a "Basis of Design Report" prepared by Bury + Partners was filed with the Loudoun County Sanitation Authority (LCSA). The purpose of the report was to provide information on the proposed wastewater treatment and subsurface disposal system that is to serve the proposed Field's Farm High School.

On November 1, 2006, the Preliminary Engineering Report prepared by Bury + Partners was submitted to LCSA and the Loudoun County Health Department. It is projected that the Final Engineering Plans and Specifications for the proposed wastewater treatment and subsurface disposal system will be filed in January.

A Preliminary Hydrogeologic Evaluation prepared by Triad was filed with the Health Department on September 8, 2006. This report provides an assessment of the site's groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity. The Preliminary Hydrogeologic Evaluation states that high yield wells are feasible at the site.

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Other utilities such as electricity and phone are presently on site. The area roadway system will provide good access.

- (S) Any anticipated odors which may be generated by the uses on site and which may negatively impact adjacent uses.

Not applicable.

- (T) Whether the proposed special exception uses sufficient measure to mitigate the impact of construction traffic on existing neighborhoods and school areas.

The Fields Farm property has access from Alder School Road via route 690 and Route 611. Construction traffic would travel on these roadways and not go through interior neighborhood streets. The residential properties in the area are typically large lot and for the most part, homes sit back from the road. The project would adhere to all regulations set forth in the Virginia Erosion and Sediment Control Handbook with special attention to be given to regulation VR625-02-00, minimum standard 17 relating to keeping public roads clean (keeping dirt and tracking off the roads). Loudoun County Public Schools will work with our contractors to minimize heavy construction traffic during peak traffic periods and request that significant deliveries arrive prior to or after the peak school bus routing times.

PHASING PLAN:

The proposed high school and associated facilities are projected for a Fall 2008 opening.

SUMMARY:

The proposed use complies with the JLMA-3 Zoning District standards, is consistent with the policies of the comprehensive plan and is compatible with the surrounding land uses. Favorable consideration of this special exception is respectfully requested.

**Loudoun County Public Schools
Special Exception Statement of Justification
Western Loudoun County High School (HS-3)
Fields Farm Property
June 29, 2006**

PROPOSAL:

The Loudoun County Public Schools (LCPS) seeks approval of a special exception to allow a high school on the Fields Farm Property located on Route 711, Alder School Road, north of Purcellville and the Route 7 Bypass, between Route 690, Hillsboro Road, and Route 611, Purcellville Road. The 230.57 acre property is primarily zoned JLMA-3, Joint Land Management Area, 1 dwelling unit per 3 acres, (227.94 acres) and M-1, Limited Industrial (2.63 acres within the Town of Purcellville). The proposed high school is to be located on approximately 145.75 acres within the JLMA-3 District. School use is permitted in the JLMA-3 District subject to approval of a special exception.

The Fields Farm Property is owned by the Loudoun County Board of Supervisors and is located in the Joint Land Management Area (JLMA or Urban Growth Area) of the Town of Purcellville. Mountain View Elementary School is located in the northwest portion of the Fields Farm property. A Special Exception (SPEX 2004-0009) has also been approved to construct the Upper Loudoun Youth Football League Recreational Facilities on the southern portion of the property (south of the future collector road). The High school is proposed to be located on the remaining portion of the land. The high school will be approximately 260,000 square feet in size with a capacity design for 1600 students. There are additional facilities associated with the high school including the high school football stadium, concession stands, ticket booths, storage buildings, the field house, baseball dugout and various athletic fields. The desired opening is for the Fall of 2008.

SPECIAL EXCEPTION FACTORS FOR CONSIDERATION:

Section 6-1310 of the Zoning Ordinance outlines various factors for consideration in the review of a special exception request. The following is an analysis of these factors in relation to the Property:

(A) Whether the proposed special exception is consistent with the Comprehensive Plan.

The proposed high school use is consistent with the Comprehensive Plan and is a feature shown on the adopted plan. The Fields Farm property is located in the Joint Land Management Area of the Town of Purcellville and, as such, is guided by the policies of the Purcellville Urban Growth Area Management Plan (PUGAMP), 1995. Figure 10 in PUGAMP is an illustrative map that depicts the existing schools and the general vicinity in which proposed schools may be located within the Urban Growth Area. Figure 10 depicts a new high school north of the Town. The policies of PUGAMP recognize that there will be a need for additional schools and state that The Town of Purcellville will generally be the preferred location for new public facilities

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unless a suitable site is not available in the Town (Policy #2 under Public Facility and Services Policies). The text also recognizes the need to re-evaluate school needs and the preferred school locations. Since the adoption of PUGAMP, subdivisions have been built north of Route 7 in the general area where the symbol was depicted for the new high school. The general location depicted for the proposed high school within the Urban Growth Area supports the Fields Farm site; the policies recognize the school need and the potential to adjust the general location. In sum, the proposed high school at Fields Farm site is consistent with the general location shown in PUGAMP as well as the identified need of the PUGAMP policies.

PUGAMP also documents the historical role the Town of Purcellville has played as the cultural and commercial hub of the surrounding farm community. Because of its central location, Purcellville is the home to a variety of public facilities that serve the western Loudoun region, including schools. The proposed high school at the Fields Farm property will be centrally located to serve the western Loudoun student population and will fulfill the anticipated public service need identified in PUGAMP. It is noted that the County purchased the Fields Farm property in 2000 for the purpose of developing the 230 acre site with public facilities. The Fields Farm property is identified in the County's Revised General Plan (The RGP) as a public facility site. It is also noted that the Draft PUGAMP depicts the Fields Farm site as a location for public facilities.

PUGAMP recognizes the County's Comprehensive Plan policies for the overall strategy for natural resource management. The RGP provides guidelines for development in accord with Conservation Design, including four specific components of the Green Infrastructure that are to be considered in the context of development proposals.

Group One/Natural Resource Assets. The Existing Conditions Plan submitted with this application depicts the natural resource assets of this Property. There are limited moderate and very steep slopes situated on the southern portion of the Property, outside of the Special Exception area of the proposed high school. Minor floodplain exists on the northern portion of the site along Alder School Road and across the site just below the existing elementary school. The proposed high school facilities will be positioned on both sides of the floodplain with road and trail crossings as depicted on the Special Exception Plat. Wetlands have been mapped for the property and are generally situated within or along the floodplain. The wetlands information is included on the Existing Conditions Plan. A 50 foot floodplain conservation buffer has been provided in accord with recommended RGP policies.

Western Loudoun County High School (HS-3)
Fields Farm Property
Special Exception
June 29, 2006

Because the Property had been farmed for many years, it is largely open fields with few tree areas situated along the exterior boundaries of the site. A letter from the Virginia Department of Conservation and Recreation states that no natural heritage resources have been documented in the project area. To ensure the absence of any rare and endangered species, an evaluation was conducted by Wetlands Studies and Solutions (WSSI). The June 19, 2006, report finds that no endangered or threatened species, rare plant species, or rare plant communities were observed and that there is low probability that any endangered or threatened species are present within the study area. A copy of the WSSI report is included with the application submission. The property is not adjacent to any scenic rivers, does not possess limestone conglomerate area or any known mineral resources. No adverse impact to groundwater is anticipated.

The school facilities layout has been designed to minimize impacts to the natural resource areas of the site. Development will be accomplished in accord with the County regulations and development standards.

Group Two/Heritage Resource Assets. A Phase I Archeological Survey is being conducted on the property and will be submitted shortly. Because this property has been farmed for many years it is anticipated that no significant archeological resources will be located.

Group Three/Open Space Assets. The development of this Property for a high school will include substantial open space assets. The RGP recognizes public school sites as an element of the County's Green Infrastructure system. Facilities provided at the school site will afford active recreational opportunities for the community. In this particular situation, there will be significant co-located recreational facilities and opportunities on the Fields Farm with the existing elementary school, the planned ULYFL facilities and the proposed high school.

Group Four/Complementary Elements. Development will comply with the County's standards for air quality, light and noise. No adverse impacts are anticipated. The high school stadium has been positioned to setback from the property boundary to comply with lighting and noise standards and buffering will be provided in accord with County requirements. To the east of the Fields Farm property is an existing floodplain which provides a natural separation between the school recreational facilities and the residential properties.

Consistent with similarly situated school facilities, LCPS has provided a note on the Special Exception Plan which provides for:

Western Loudoun County High School (HS-3)
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Site building and parking lot lighting shall be designed and constructed with cut-off and fully shielded fixtures so that the light will be directed inward and downward toward the interior of the property, away from adjacent streets and properties. Parking lot lighting shall be turned off within one hour following evening activities and no later than 12 a.m. Athletic field lighting shall also be directed inward and downward toward the fields. Athletic field lighting will incorporate a reflector technology system that directs light onto the field, minimizes glare and spillage, and reduces energy and maintenance costs.

The public address system shall be limited to the stadium/track and the high school softball and baseball fields. The public address system shall not be used beyond 12 a.m.

In summary, the proposed high school site is consistent with the comprehensive plan policies and will meet a critical public service need. PUGAMP anticipates the need for additional schools, such as the proposed high school, in the Urban Growth Area.

(B) Whether the proposed special exception will adequately provide for safety from fire hazards and have effective measures of fire control.

The proposed school will be constructed to meet required building safety codes, including the provision of a sprinkler system. Fire protection services will be provided by the volunteer fire companies serving the area. Access to the school is proposed via Alder School Road, with a shared access with the existing elementary school. It is proposed to also have an alternate emergency access either from the existing driveway on Alder School Road or through the future ULYFL site.

(C) Whether the level and impact of any noise emanating from the site, including that generated by the proposed use, negatively impacts the uses in the immediate area.

The primary noises associated with the school facility will be generated from the picking up and dropping off of students and from outside sports activities. The primary physical education (PE) fields are located to the south of the school between the drainfield area to the west and the reserve drainfield area to the east. All of the PE fields are separated from the adjacent residential areas by either

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drainfield area or by existing ponds. The stadium and additional softball/baseball and soccer fields are located on the northern portion of the site between the elementary school to the west and the (off site) existing floodplain to the east. The closest residential home is situated along Alder School Road to the north and west of the athletic fields. An enhanced evergreen buffer is proposed along the boundaries to this existing home and along the eastern property boundary to the east of the proposed stadium.

(D) **Whether the glare or light that may be generated by the proposed use negatively impacts uses in the immediate area.**

Lighting of the school facilities is accomplished to provide visibility in the parking lot and around the immediate school building for safety and security purposes. The high school softball and baseball playing fields as well as the stadium will be lighted. As noted previously, building lights will be cutoff and fully shielded lighting fixtures, directed inward and downward toward the interior of the property. The lighted playing fields and stadium will be positioned and buffered to ensure lighting will not adversely impact surrounding properties. In addition, the athletic field lighting will incorporate a reflector technology system that directs light onto the field, minimizes glare and spillage, and reduces energy and maintenance costs.

(E) **Whether the proposed use is compatible with other existing or proposed uses in the neighborhood, and adjacent parcels.**

The subject property is presently utilized for school purposes and is approved for a recreational facility. The addition of the high school is a logical extension of these existing community public service uses. The area surrounding the Fields Farm property is in large lot residential use. The layout of the site coupled with existing natural features will ensure compatibility with the surrounding uses. School facilities are traditionally constructed in residential areas because they serve residential communities and are considered to be a compatible use.

(F) **Whether sufficient existing or proposed landscaping, screening and buffering on the site and in the neighborhood will adequately screen surrounding uses.**

Please reference the accompanying Special Exception Plat.

- (G) **Whether the proposed special exception will result in the preservation of any topographic or physical, natural, scenic, archaeological, or historic feature of significant importance.**

The natural features of the site will be altered as a result of school site construction. The layout has taken into consideration the natural features including the minor floodplain and wetland areas. The RGP recommended 50 foot floodplain conservation buffer has been provided. An archaeological study is presently being conducted and the report will be submitted shortly. Because this property has been farmed for many years it is anticipated that no significant archeological resources are will be located.

- (H) **Whether the proposed special exception will damage existing animal habitat, vegetation, water quality (including groundwater) or air quality.**

No adverse impacts to environmentally sensitive land, rare or endangered plant/animal species habitat, and water or air quality are anticipated. Review by the State Department of Conservation and Recreation found no documented natural heritage resources in the project area and the rare and endangered species survey conducted on the property found no species and low probability for occurrence.

- (I) **Whether the proposed special exception at the specified location will contribute to or promote the welfare or convenience of the public.**

The proposed high school at the specified location will contribute to the welfare and convenience of the public. The proposed school will serve a large area of Western Loudoun; however, the majority of the student population is situated along the Route 7 corridor. Placing the school at Fields Farm will provide for a convenient location to the student population. Its proximity to Harmony Intermediate will also afford a good transportation service between the schools.

- (J) **Whether the traffic expected to be generated by the proposed use will be adequately and safely served by roads, pedestrian connections and other transportation services.**

A detailed traffic analysis has been conducted and filed with this application. The site can be adequately and safely accessed by the surrounding road network. Please reference the submitted traffic study.

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- (K) Whether, in the case of existing structures proposed to be converted to uses requiring a special exception, the structures meet all code requirements of Loudoun County.

Not applicable.

- (L) Whether the proposed special exception will be served adequately by essential public facilities and services.

Police protection and fire and rescue service will be provided through the County and the volunteer fire and rescue companies.

- (M) The effect of the proposed special exception on groundwater supply.

As a part of development, good engineering practices will be implemented. No adverse impact to groundwater supply is anticipated.

- (N) Whether the proposed use will affect the structural capacity of the soils.

Soil analysis and construction in compliance with the findings and recommendations of the soils investigation required at site plan stage will ensure that adequate structural capacity is maintained for the proposed use.

- (O) Whether the proposed use will negatively impact orderly and safe road development and transportation.

Safe road access will be available to the proposed school site. Please reference the traffic analysis provided as a part of this application submission.

- (P) Whether the proposed special exception use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan.

The availability of an excellent education system and adequate facilities will promote the location of businesses to Loudoun County, thereby positively influencing employment opportunities and economic activity. In addition, the high school will provide approximately 200 jobs.

- (Q) Whether the proposed special exception considers the needs of agriculture, industry, and businesses in future growth.

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Reference (P) above.

(R) Whether adequate on and off-site infrastructure is available.

Adequate infrastructure is available to serve the proposed school use. On site water and waste water facilities will be constructed to serve the use. Other utilities such as electricity and phone are presently on site. The area roadway system will provide good access.

(S) Any anticipated odors which may be generated by the uses on site and which may negatively impact adjacent uses.

Not applicable.

(T) Whether the proposed special exception uses sufficient measure to mitigate the impact of construction traffic on existing neighborhoods and school areas.

Best construction practices will be employed to reduce any potential impacts.

PHASING PLAN:

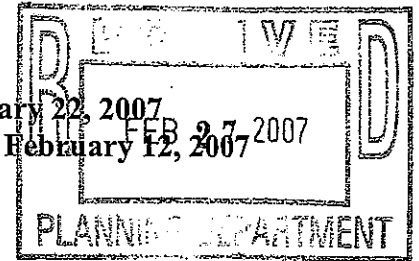
The proposed high school and associated facilities are projected for a Fall 2008 opening.

SUMMARY:

The proposed use complies with the JLMA-3 Zoning District standards, is consistent with the policies of the comprehensive plan and is compatible with the surrounding land uses. Favorable consideration of this special exception is respectfully requested.

**Western High School At Fields Farm
SPEX 2006-0022**

**Response to Town of Purcellville Comments Dated February 22, 2007
Response to Kimley-Horn Analysis of HS-3 Traffic Study Dated February 12, 2007
(both received February 22, 2007)**



A. Commission Permit/PUGAMP Amendment – pages 1-4

Response: School Planning staff respectfully disagrees with the Town of Purcellville's position on the commission permit issue. In the response to the first round of referral comments dated December 12, 2006, LCPS staff responded in detail to this question. Purcellville's February 22, 2007 referral fails to acknowledge 1) the Town's Board of Zoning Appeals ruling of August 30, 2006 which determined that the Town has no jurisdiction on land outside of the Town's boundaries and 2) the County of Loudoun's Board of Zoning Appeals Ruling of September 28, 2006 which upheld the Zoning Administrator's determination of June 22, 2006, which determined that the proposed high school is a feature shown on the Comprehensive Plan and a commission permit is not required for this use and further that in the unincorporated areas of the County, including PUGAMP, there is no requirement for concurrence by the town, including Purcellville. These matters are under appeal by the Town of Purcellville to the Circuit Court of Virginia and are scheduled for review on March 8, 2007 and March 16, 2007.

B. Proposed Utility System – pages 4-6

School Board staff has relied on the guidance of its consultants (Bury and Partners) and the local and state Health Departments for the design and permitting of the water and wastewater facilities that will serve the proposed high school. The drain fields for Mountain View E.S., the proposed high school, and the Upper Loudoun Youth Football League (ULYFL) are separate and distinct. Should the ULYFL desire to install a drain field system in the future, it will have both the ability and capacity to do so. The Town correctly notes there are two wells shown on the SPEX plat, one will be utilized by Mountain View E.S. and the other by the proposed high school. All documents sought by the Town have been made available to the Town via their Freedom of Information Requests and via the documentation filed as a part of the SPEX and utility permitting process.

C. Relationship to other County Planning Documents – pages 6-7

See A above.

D. Transportation and Traffic Impact Analysis – pages 7-12

The traffic impact analysis was prepared in consultation with the Town of Purcellville, the County Office of Transportation Services (OTS) and the Virginia Department of Transportation (VDOT) using agreed upon methodology, techniques, and procedures. Both OTS and VDOT have provided feedback on the traffic study. Neither agency has indicated that the study had major shortcomings or lacked professionalism.

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Response to Town of Purcellville Comments Dated February 22, 2007

Response to Kimley-Horn Analysis of HS-3 Traffic Study Dated February 12, 2007
(both received February 22, 2007)

E. Statement of Justification – pages 12-14

The statement of justification accurately reflects the proposed use and its relationship to adopted comprehensive plan policies. In fact, Community Planning recommends that the application be approved with conditions.

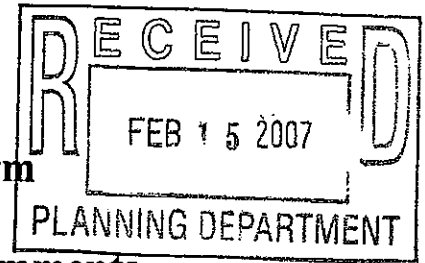
F. Environmental Resources – p. 14

LCPS has used the services of a professional environmental company (Timmons Engineering) to meet the County and the Corps of Engineers requirements regarding wetlands and floodplain areas on the property. The SPEX plat has been revised in consultation with Loudoun County staff.

G. Summary

LCPS staff respectfully disagrees with the Town of Purcellville's conclusions regarding the SPEX application.

**Western High School at Fields Farm
SPEX 2006-0022
Response to Second Review Referral Comments
February 15, 2007**



**Office of Transportation
Comments dated January 16, 2007**

Comment 4 regarding typical sections on Route 711 and Route 690. OTS staff seeks VDOT engineering staff to weigh in on the typical sections on these roadways.

Response: The traffic study dated May 30, 2006 has been submitted to and reviewed by VDOT. Comments received from VDOT on 9/28/06 state that VDOT supports the recommended improvements outlined in the traffic analysis for the proposed use. The comments provide that additional comments specific to the re-timing of signals will be forthcoming from the VDOT Engineering Section. On December 18, 2007 there was a field visit to the site and the various intersections proposed for improvement with County transportation staff and VDOT. Second referral comments dated January 9, 2007 from VDOT state that VDOT has reviewed the application and has no objection to the approval of the application noting that they will provide comments at the construction plan stage. Comments received by Timmons Group on the proposed round-about 30% design plan go beyond the round-about review and respond to the traffic impact analysis. Again, the VDOT comments indicate no objection to the use in the proposed location or the serving road network. In addition, VDOT comments dated December 27, 2006, provided on the Site Plan (STPL 2006-0081) indicate no objection to the project as proposed. It is noted that separate plans for the Route 711 improvements points will be provided.

Comment 7: OTS encourages the school to inform student drivers of the best routes to use and which to avoid such as Route 711 between Route 287 and Route 611. In addition, the school should insure that school bus routes not utilize this section of Route 711 between Route 287 and Route 611 unless picking up or dropping off students who live on this section of Route 711.

Response: When the school opens, LCPS will work with the principal to inform student drivers of the best routes to access the school. LCPS will not schedule buses to utilize the unpaved section of Route 711 between Route 287 and Route 611 unless there is a need to pick up/drop off children along this section of Route 711. Should, however, there be a traffic accident or some other event that would require buses to use this section in order to get children to school then it will be necessary to take this route but this section will not be routinely used.

Comment 8: Staff recommends that instead of providing a cash contribution toward future construction of regional road improvements LCPS construct the top two "background traffic" related improvements. The construction of a south bound

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right turn lane on Rt. 287 onto Hirst Drive with appropriate signal modifications and a west bound right turn lane on Route 7/Main Street onto Hatcher Avenue is recommended.

Response: The following ⁵ intersections were shown in the report as warranting improvements not related to school traffic:

- Route 287 and Hirst Drive
- Main Street/21st/23rd 21/23/690
- Main Street and Hatcher Ave
- Route 287 and Route 7 Business

Main Street 23 st
Assuming a pro-rata contribution based on peak hour traffic volumes and the provided construction costs, it is estimated LCPS would be required to make a cash contribution of approximately \$135,000. The cost estimates for the recommended intersection improvements suggested by OTS are \$425,000 and \$310,000, respectively. The cost of either intersection far exceeds the pro-rata share which LCPS was originally asked to contribute. As an alternative, LCPS suggests adding the regional contribution to the contribution toward the Rt. 9/Rt 690 intersection (see below).

Comment 8 continued: Staff recommends that LCPS consider the off set entrance to the Hillsboro Elementary School on the north side of the Route 9/Route 690 intersection in carrying out the improvements to the Route 9/Route 690 improvements.

Response: LCPS have been working with the Town of Hillsboro to review the proposed improvements to the Route 9/Route 690 intersection. This improvement is a regional improvement to which LCPS would propose to contribute funds. The traffic analysis had examined this intersection as an improved signalized intersection. The Town of Hillsboro, however, would like to utilize a round-about in lieu of an upgraded signalized intersection. LCPS proposes to contribute a fair share contribution to this improvement, which is expected to be pursued by others in the near term. The projected school traffic at this intersection is 15% with an estimated fair share contribution toward the proposed round about of \$97,500.00.

Proposed Phasing of Improvements: At the 2/7/07 meeting staff and the applicant discussed proposed phasing of the transportation improvements for the high school. The following is an outline of the proposed phasing:

Provide prior to occupancy:

- ▶ Allder School Road and HS Entrance: WB left turn lane
- ▶ Route 611 and Allder School Road: EB Right turn lane
- ▶ Route 690 and Allder School Road: Roundabout

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- ▶ Route 690 and Route 9: Contribute fair share to future Roundabout (\$97,500.00)
- ▶ Regional road contribution of \$136,407.00

Provide a year after occupancy:

- ▶ Hirst Drive and Hatcher Avenue: SB left turn lane and WB right turn lane
- ▶ Hirst Drive and Maple Avenue: SB left turn lane and NB right turn lane

Zoning Administration
Comments dated January 26, 2007

OTHER ISSUES

Comment: Section 2-1204 Minimum Side Yard – Although a 15' Type II side landscape buffer is required, the proper side yard for the subject property is 10 feet. Correct the plat accordingly.

Response: The SPEX plat has been corrected to reflect the 10 foot side yard.

Comment: Section 2-1206(C)(1) Provision of Sidewalks and/or Trails – Sidewalks and/or trails *shall* be provided, at a minimum, along one side of all streets. No sidewalk is shown along the entire frontage of Alder School Road.

Response: At the 2/7/07 meeting, it was agreed that the proposed trail along Alder School Road to the south of the floodplain meet the requirements of Section 2-1206 (C) (1).

Comment: Section 2-1206(C)(2) Sidewalk and/or Trail Connections – Connections should be made to all existing and/or planned sidewalk/trail systems adjacent to the property. Staff notes that no pedestrian connection has been made to the property immediately south of the site.

Response: The ULYFL is to the south of the proposed high school special exception area and a pedestrian connection has been provided. In addition, at the 2/07/07 meeting with staff the proposed trail along Alder School Road has been realigned to provide a connection to the neighborhood to the east.

Comment: Section 4-1500 Floodplain Overlay District – Update General Note 4 on Sheet C1.0 to state that portions of the property are located within the minor floodplain and that those portions are within the Floodplain Overlay district and subject to the requirements of Section 4-1500.

Response: The recommended change has been incorporated.

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Comment: Section 5-900 Setbacks from Specific Roads – Add reference, on Sheet C1.0 to the fact that a 200' building setback and 100' parking setback is required from the Route 7 Bypass.

Response: The recommended change has been incorporated.

Section 5-1100 Off-Street Parking and Loading Requirements – General Note 8 on Sheet C1.0 incorrectly references Section 5-1200. Section 5-1100 is the Section which regulates parking and therefore the note must be updated.

Response: The correction to reference the proper section has been incorporated.

Comment: Section 5-1400 Buffering and Screening – The statement of justification states that a Type II Buffer will be provided surrounding the Special Exception use, yet the plat does not show this. Show the required Type II Buffer surrounding the high school use. As this lot is a through lot, there is no rear buffer requirement, but two front buffers (along the roads) and two side buffers instead.

Response: The Type II Buffer has been revised to surround the Special Exception area. It is noted that on the western side of the property, the buffer is between the drainfield area and the school to provide a better buffer to the school facilities and to keep maintenance vehicles off of the drainfield area.

Comment: Section 6-1310(E) Issues for Consideration – The layout of the site and the existing natural features do not mitigate all potential impacts of the proposed high school use upon adjacent residential uses. Discuss, in more detail, the measures that will be taken to mitigate the impacts on adjacent residential uses.

Response: The Statement of Justification has been revised to provide additional detail on the measures to be taken to mitigate the impacts on adjacent residential uses, most notably the addition of an evergreen landscape planting, with planting specifications.

Comment: Section 6-1310(F) Issues for Consideration – The applicant has not provided the Type II Buffer referenced within the Statement of Justification. Provide the Buffer referenced.

Response: The Type II Buffer has been depicted on the SPEX plat.

Comment: Sections 6-1310(J) & (O) Issues for Consideration – The applicant has not addressed how the traffic impacts identified within the traffic study from the school use will be mitigated.

Response: The proposed traffic improvements have been added to the Statement of Justification.

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Comment: Section 6-1310(R) Issues for Consideration – At this time, no study stating that adequate wastewater disposal will be available is referenced.

Response: The Preliminary Engineering Report, dated November 1, 2006, provides this documentation to the Health Department and LCSA for review. This study is referenced in the Statement of Justification.

Comment: Section 6-1310(T) Issues for Consideration – Specifically address what will be done to mitigate the impact of construction traffic upon the surrounding neighborhoods as well as what will be done to mitigate the impacts upon the existing elementary school on-site.

Response: The Statement of Justification provided information relative to the various measures that will be taken to minimize construction impacts. (Minimize construction traffic during peak commuter/school traffic periods, comply with Erosion & Sediment Control Requirements) LCPS has expanded, remodeled, renovated and constructed new schools at or adjacent to existing schools, including elementary facilities. LCPS will minimize any potential impact to the existing elementary school. The zoning staff has recommended that a separate construction entrance be utilized for the high school construction. LCPS is willing to pursue a temporary construction entrance at the existing driveway to the east of the Dowling property. However, should VDOT require the installation of turn lanes at this location LCPS may need to utilize the existing entrance. In addition, there are certain vehicles that will necessitate a wider turning radius and those will need to use the existing, wider entrance.

Additional Comments:

Comment: Update general note 16 on Sheet C1.0 to state that the proposed use is a high school, as this reflects a use which is listed within the Zoning Ordinance.

Response: The recommended change has been incorporated.

Comment: Within the zoning requirements table, remove the \pm symbols next to the property acreages at the bottom of the table.

Response: The +/- symbol has been removed, however, we have incorporated changes that provide for minimal flexibility in square footages/percentages throughout. While we are fairly certain our calculations are accurate, should there be a need to slightly adjust the building square footage or to adjust the SPEX land area in coordination with the County, the SPEX plat will provide for such flexibility.

Comment: Clarify, within the provided buffer table on Sheet C1.0, that where the evergreen buffers are proposed the landscape buffer shall be a total of 30 feet in depth.

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Response: The evergreen buffer has been clarified as recommended.

Comment: The Open Space Calculation for the entire parcel (Sheet C1.0) is unclear. The developed and open space areas should be listed separately to clarify which areas are added and/or subtracted from the calculation.

Response: The Open Space Calculation has been reorganized as recommended.

Comment: The Open Space Calculation Map (Sheet C5.0) seems to double count acreages. Additionally, there is no legend which identifies the several types of crosshatching that appear on the sheet. Staff recommends removing all of the existing labels, providing one label stating the total developed acreage outside of open space, one label stating the entire open space acreage and one label which identifies the total developed coverage within open space. Providing information in this manner will be show that all requirements have been met and will also be clearer than what is currently provided.

Response: The Open Space Calculation Map has been reorganized to provide clarification.

Comment: Provide a detail of the proposed evergreen buffer, as this is not a requirement within the Ordinance. Additionally, state the length of the proposed buffers for both of the locations shown.

Response: A detail of the proposed evergreen buffer has been added to the plat.

Comment: The applicant has provided a 50' conservation buffer adjacent to the minor floodplain, yet the proposed high school sanitary facility is located within this buffer. Staff questions the appropriateness of this facility within a conservation buffer.

Response: At the 2/7/07 meeting, the Zoning Staff advised that they had conferred with the Environmental Review staff and that the minor encroachment is acceptable, provided the greater 50 foot buffer is maintained. The condition will need to be worded to reflect the minor encroachment.

Comment: Portions of the shot put area are located within the evergreen buffer. Active recreation areas are not permitted within buffers. Remove the shot put area.

Response: The recommended change has been incorporated.

Comment: Staff notes that a possible drain field location is labeled close to the conceptual alignment for the Purcellville Route 7 North Collector Road, yet no drainfield is shown.

Western Loudoun High School
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February 15, 2007

Response: The "possible drain field area" is not being utilized and has been removed from the plat.

Comment: Darken the crosswalks shown on the pedestrian access plan (Sheet C4.0) for clarification.

Response: The recommended change has been incorporated.

Comment: Staff notes the extreme proximity of the high school water treatment facility to the football field and track. A location further from the field, or landscaping around the facility would be preferable, for safety and security.

Response: There is a retaining wall and fence around the stadium. In addition landscaping will be provided around the water treatment facility.

Comment: Staff continues to note a lack of sidewalks/trails to the tennis courts and practice fields at the southern end of the property.

Response: Trails throughout the school facilities have been provided.

C. CONDITIONS OF APPROVAL

Comment: Staff recommends the inclusion of a condition requiring substantial conformance with the Special Exception Plat, to aid in the ease of administration.

Response: Agreed

Comment: Staff recommends the inclusion of a condition requiring substantial conformance to the pedestrian access map shown on Sheet C4.0 once a trail along Alder School Road has been included.

Response: Agreed

Comment: Staff recommends the inclusion of a condition requiring that the school related transportation improvements identified within the traffic study be completed prior to the issuance of an occupancy permit for the high school use.

Response: LCPS is working with VDOT and OTS to determine the phasing of the proposed road improvements. LCPS proposes that the majority of the improvements be provided prior to occupancy and that two improvements be phased to follow a year after occupancy:

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Provide prior to occupancy:

- ▶ Allder School Road and HS Entrance: WB left turn lane
- ▶ Route 611 and Allder School Road: EB Right turn lane
- ▶ Route 690 and Allder School Road: Roundabout
- ▶ Route 690 and Route 9: Contribute fair share to future Roundabout (\$97,500.00)
- ▶ Regional road contribution of \$136,407.00

Provide a year after occupancy:

- ▶ Hirst Drive and Hatcher Avenue: SB left turn lane and WB right turn lane
- ▶ Hirst Drive and Maple Avenue: SB left turn lane and NB right turn lane

Comment: Staff recommends a condition requiring that the construction entrance for the high school site be the existing driveway to the south of the Dowling property (MCPI: 487-45-2474). The condition should also prohibit the use of the existing elementary school access point by construction traffic. The use of this existing driveway will safely segregate all construction traffic from all existing elementary school traffic, thus ensuring the safety of children, their families and school staff.

Response: LCPS is willing to locate the primary construction entrance for the high school at the existing driveway to the south of the Dowling property. Should VDOT ask for improvements that preclude our ability to locate the construction access in this location then we will need to be able to use the existing elementary school access point. In addition, LCPS asks that use of the existing ES access point not be prohibited altogether in as much as there are certain vehicles that would be better served through this wider access.

Comment: Staff recommends a condition requiring the proposed enhanced evergreen buffers in the locations shown on the Special Exception Plat. Once a detail has been provided, reference to this detail should be included within the condition language.

Response: Agreed

Comment: Staff recommends a condition requiring that site, building and parking lot lighting shall be designed and constructed with cut-off and fully shielded fixtures so that the light will be directed inward and downward toward the interior of the property, away from adjacent streets and properties.

Response: Agreed

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Comment: Staff recommends a condition requiring that parking lot lighting shall be turned off within one hour following the end of evening activities, or 11 p.m., whichever occurs first.

Response: Agreed

Comment: Staff recommends a condition requiring that athletic field lighting be directed inward and downward toward the fields. Athletic field lighting shall incorporate a reflector technology system that directs light onto the field and minimizes glare and spillage.

Response: Agreed

Comment: Staff recommends a condition requiring that installation of the outdoor public address system be limited to the stadium/track and the high school baseball and softball fields. Noise emanating from this system cannot exceed 60 dBA at the property boundaries and use of the system shall be prohibited after 11 p.m.

Response: Agreed

Comment: Staff recommends a condition requiring the proposed 50 foot floodplain conservation buffer.

Response: Agreed, subject to the minor encroachment by the proposed wastewater treatment facility.

Environmental Review Team
Comments dated January 30, 2007

Staff recommends a commitment to reforestation of the river and stream corridors within the school property.

Response: LCPS is willing to work with the County to provide a reforestation of the river and stream corridor.

Recommended water conservation measures for fire protection water storage, low flow toilets and no flow urinals.

Response: To address water conservation measures, LCPS is willing to work with the school construction contractor to incorporate a system that would collect rooftop runoff into holding tanks for use purposes. Until the contractor is hired and the system is designed, it is not known if this can be effectively achieved. LCPS will work with the contractor and keep the staff informed of efforts toward this goal. With regard to water conserving bathroom fixtures, LCPS will continue to utilize low flow toilets in the proposed school consistent with building code requirements. LCPS would prefer not to

Western Loudoun High School
SPEX 2006-0022
Response to Second Review Comments
February 15, 2007

participate in the use of no-flow fixtures, even on a trial basis. Based on our prior experience with these types of facilities, with regard to maintenance and sanitary issues, we would like additional time to examine available technologies to see if they have evolved or improved before incorporating these features into another facility.

Community Planning
Comments dated February 1, 2007

Comment: Staff recommends a trail connection between the football stadium and the large high school parking lot, with a span style bridge or boardwalk over the floodplain.

Response: LCPS has reviewed the request to add a second crossing of the floodplain for pedestrian access. This could be costly for the minor difference in distance gained. The proposed road/pedestrian crossing has been located at the narrowest point along the floodplain. All pedestrians going to a scheduled game or event will need to enter the stadium from the northern gates at the ticket booth. There is an opportunity to extend a trail from the water treatment access road between the parking lot and the stadium to connect to the sidewalk leading to the stadium. This reduces the walking distance from the main parking lot by approximately 600 feet. This additional trail link has been incorporated into the pedestrian trail system.

Comment: Staff recommends the applicant work with the County to provide a reforestation of the river and stream corridors on the Fields Farm property.

Response: LCPS is willing to work with the County to provide a reforestation of the river and stream corridor.

Comment: Staff recommends placing a fence, berms, landscaping or other type of buffering around the parking area and internal roadway adjacent to the river and stream corridor resources between Rt. 711 and the proposed football stadium to prevent possible encroachment into the environmental area being preserved.

Response: There is a planned retaining wall between the parking area and the baseball field to the west. There is a trail and a bio-retention pond situated to the north of the parking area and landscaping proposed along the eastern boundary of the parking area. These features will preclude parking encroachment into the environmental area to the north and east.

**Western High School at Fields Farm
SPEX 2006-0022
Response to Referral Comments
December 12, 2006**

**Loudoun County Health Department
Comments dated August 29, 2006**

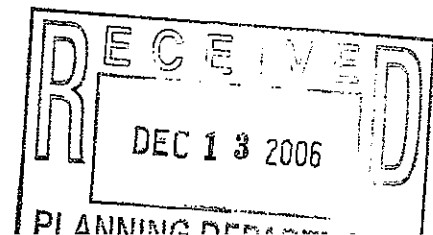
Comment 1: Health Department staff recommends: Denial. No septic design has been received for the school or the proposed uses. This office cannot comment on the proposed special exception or the actual or proposed usage. No proposal from an engineering firm has been received for formal comments or scheduling a preliminary engineering conference.

No abandonment permits have been filed for the existing septic and wells.

No proposed well site has been proposed for school. This must be done through the County and State Departments. No proposed use can be within 100' of any of the existing wells for the schools.

Response: On August 11, 2006, a "Basis of Design Report" prepared by Bury + Partners was filed with the Loudoun County Sanitation Authority (LCSA). The purpose of the report was to provide information on the proposed wastewater treatment and subsurface disposal system that is to serve the proposed Field's Farm High School. The proposed system will collect the wastewater from the school by gravity collection to a pump station where it would be transferred to a pre-treatment system. From the pre-treatment system, the effluent will flow to the drainfield dosing tanks and the wastewater would be pumped to a drip irrigation disposal field. The primary drip irrigation absorption field will be approximately 3.6 acres in size with an additional reserve area. The Basis of Design Report evaluated three options for the pre-treatment system. The system will be owned by Loudoun County Public Schools (LCPS) but LCSA will operate the facility. Comments on the Basis of Design Report were provided by LCSA on October 4, 2006.

On November 1, 2006, the Preliminary Engineering Report prepared by Bury + Partners was submitted to LCSA and the Loudoun County Health Department. The local Health Department has forwarded the Engineering Report to the State Health Department for comments. The preliminary engineering conference is held after submission of the Preliminary Engineering Report and tentatively scheduled for December 12, 2006. Comments on the Report are anticipated in 30+ days. Upon receipt of the Health Department and LCSA comments, the final design can be prepared. It is projected that the Final Engineering Plans and Specifications for the proposed wastewater treatment and subsurface disposal system will be filed in January.



The Health Department has issued the necessary permits for the abandonment of the existing wastewater systems and wells (that served the farm house). These permits were issued on November 8th and 9th.

A Preliminary Hydrogeologic Evaluation prepared by Triad was filed with the Health Department on September 8, 2006. This report provides an assessment of the site's groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity. The Preliminary Hydrogeologic Evaluation states that high yield wells are feasible at the site. (Page 13) An on-site meeting with the Health Department, Triad, the well driller and LCPS was held on October 5, 2006. The Health Department has issued permits for the well installation (November 8, 2006). The proposed well locations have been approved by the Health Department and drilling was accomplished in late November. The next steps are to schedule the Health Department inspection of the well grouting activity, to conduct a drawdown test and sampling of the water quality and to prepare a well report. These activities are projected to be accomplished by early January.

Comment 1: In order to minimize the impact of site traffic turning into/from the proposed entrances on through traffic on Routes 711 and Route 690, the applicant needs to provide right and left turn lanes which meet VDOT standards. Additional right of way may be required. The location of the proposed Route 690 entrance is awkward with respect to the alternative ramp configurations north of Route 7 needs to be taken into consideration. VDOT standards for intersection spacing and the potential for weave/merge issues specifically need to be addressed. The entrance shown on Route 690 may need to be removed or relocated further west. Additional land may also be needed for future interchange designs for Route 7 Bypass/Route 690.

Response: Left and Right turn lanes will be provided on Route 711 at the school's entrance, which is currently used by Mountain View Elementary School. It is understood that additional right of way may be required to accommodate these improvements; work is currently underway to determine the amount of additional right of way that will be necessary.

The only access to Route 690 from the high school is an emergency access to be provided across the Upper Loudoun Youth Football League recreational facility. The proposed Route 690 entrance will provide only secondary emergency access. This 12' facility will not be open to the general public for daily use by school-related traffic. The traffic study did not assume any site-generated traffic would use this entrance. The Special Exception for the high school does not extend below the proposed alignment of the future Route 7 North Collector Road.

Comment 2: Several interchange designs are being considered for Route 7 Bypass/Route 690. While a final design has not yet been reviewed and approved by VDOT, the applicant should agree to provide all necessary right of way as needed and accommodate an entrance relocation if needed. At a minimum, the various ramp configurations identified to date must be accommodated. As previously noted, the final interchange design may require changes to the site plan on the south side.

Response: Several preliminary interchange designs were produced in conjunction with a traffic study that was prepared for proposed 30-acre County Park to be located north of the Town of Purcellville off of Route 690, north of Route 7 Bypass, in December 2002. To date, the County has not presented the design team with a preferred alternative. In addition, VDOT has neither reviewed nor commented on the designs presented in the 2002 study. Further, the proposed special exception does not extend into the land area that may be needed for the Route 7 Bypass/Route 690 interchange. The Fields Farm property is owned by the County of Loudoun.

Comment 3: Will the proposed High School site access Route 690 through the Fields property? Please clarify.

Response: Secondary emergency access will be provided off of Route 690; daily school-related traffic will not utilize the entrance off of Route 690. All daily traffic related to the proposed high school will access the site via the existing drive at Mountain View Elementary School, off of Route 711.

Comment 4: Due to narrow widths in some areas, the typical sections on Route 711 and Route 690 may need to be improved to accommodate the anticipated site traffic and meet VDOT standards.

Response: This is the second traffic study performed for a proposed school in the area, the first being Mountain View Elementary School. The only area of concern identified for either facility has been the Route 711/Route 690 intersection.

Comment 5: There is currently no sidewalk or trail on these portions of Route 711 or Route 690. The applicant should provide 8-10' wide multi-purpose trails along the site frontage of Route 711 and Route 690. In addition, the applicant needs to coordinate pedestrian /bicycle trail access with the Town of Purcellville to the south to facilitate pedestrian access between the Town and this site.

Response: A pedestrian circulation plan has been added to the Special Exception sheets (Refer to Sheet C4.0) Per staff recommendation, a trail has been added along the frontage of Route 711. In order to minimize the impact to the floodplain, the trail has been placed on the south side of the floodplain and integrated into the school pedestrian network to serve both pedestrians along Route 711 and to provide access to the school facilities. In addition, the plan depicts the connection to the proposed Upper Loudoun Youth Football League trail system and the ultimate connection to the Town of Purcellville's pedestrian access. The proposed high school does not access Route 690, except for emergency vehicles only when necessary.

Comment 6: In order to accommodate the planned Purcellville Route 7 North Collector Road in the vicinity, the applicant shows dedication of 70 feet of right of way within the southern portion of the property. This is a desirable feature which should be maintained.

Response: The Fields Farm property is owned by the Loudoun County Board of Supervisors. The applicant, LCPS, has respected the future planned northern collector road by identifying this planned roadway and keeping the proposed use from encroaching.

Comment 7: The traffic study does not assign any site traffic to two unpaved road segments in the vicinity of the proposed school. These are Route 711 between Route 611 and Route 287 and Route 611 between Route 9 and Route 711. OTS understands that the school will have control over the bus routes to and from the site, however, how will

the school prevent or discourage students driving their automobiles over these road segments? Please clarify.

Response: A large number of the public roads in western Loudoun are unpaved. The Countywide Transportation Plan (CTP) states that there is a 331 mile-network of unpaved rural roads that reflects the County's agricultural heritage. The CTP recognizes unpaved roads as having a natural traffic calming effect and indicates that the County is committed to the preservation of the unpaved rural road network in its present state with exception only for essential safety enhancements. Loudoun County Public Schools has identified safe, paved routes to access the proposed high school. The traffic study has demonstrated that these roads can adequately serve the proposed use. The choice of which routes a driver utilizes to reach the school will be made by the driver. As a practical matter, many of the western Loudoun high school kids have learned to drive on Loudoun's unpaved roads. Loudoun County Public Schools cannot dictate the use of public streets. What we can and have done, however, is to ensure that safe, adequate access routes are available to reach the high school.

Comment 8: On page 17 (Table 4) of the traffic study, a series of recommended transportation related improvements are listed for the proposed high school. The traffic study divides the recommended improvements into those warranted directly by the proposed high school and those warranted by existing/other background traffic growth. These are as follows:

Background Traffic

- Traffic signals at the Business Route 7 and the Harmony Middle School, Route 287 and 21st Street/20th Street/Route 690 intersections and the Route 287/Hirst Drive intersection. In addition, turn lanes are recommended at the Business Route 7/Route 287, Route 287/Hirst Drive, Hirst Drive/Maple Avenue, Hirst Drive/Route 690, and Main Street and 32nd Street, 23rd Street, 21st/20th Street/Route 690 and Hatcher Avenue intersections.

High School Traffic

- Turn lanes at the Hirst Drive/Hatcher Avenue intersection, the Route 690/Route 9 intersection and Alder School Road (Route 711)/proposed site access. In addition, the traffic study notes that a 100' roundabout is needed at the Route 690/Alder School Road intersection.

VDOT needs to comment on the proposed round about at the Route 711/Route 690 intersection as compared with a possible future signal with turn lanes. The round about will require additional right of way to be obtained. These options also need to be weighed in light of the sight distance problems at this intersection.

Please note that a future interchange (beyond the proposed 2008 opening of the high school) at the Route 7 Bypass/Route 690 crossing would help to divert some traffic from parallel facilities such as Business Route 7/Main Street, Hirst Drive and Route 9. However

the design and construction funds for this interchange have not been allocated to date. In addition, OTS staff believes that some of the recommended improvements listed as created by the background traffic are, in fact, also partially created by the proposed high school. These improvements include the recommended signal and east bound turn lane at the Business Route 7/Route 287 intersection, the traffic signal upgrade and turn lanes at Route 287/Hirst Drive, the east bound left turn lane on Business Route 7 (Main Street) onto 23rd Street, the signal and turn lanes at Business Route 7 (Main Street)/21st Street/20th Street/Route 690 intersection and turn lanes at the Business Route 7/ Hatcher Avenue intersection. In addition to those transportation improvements listed as warranted by the high school traffic, the applicant needs to partially fund these improvements based on the percentage of site traffic. Coordination is also needed between the Town of Purcellville, VDOT and Loudoun County to coordinate design and right-of- way issues including the proposed roundabout at the Route 690/Alder School Road intersection, right of way acquisition in the Town and County and funding. Further coordination and decisions are needed.

Response: To date, VDOT has not commented on the acceptability of the proposed roundabout at the Route 690/Route 711. It should be noted that VDOT recommended a roundabout be considered at this location given the existing geometric constraints. Preliminary design work relating to the proposed roundabout is currently underway; anticipated right of way impacts will be determined using the preliminary design work.

Those improvements shown as pertaining to background conditions were determined using (1) the turn lane nomographs from the VDOT Road Design manual and (2) intersection delay times. The need for these improvements is based solely on existing peak hour traffic volumes or 2008 peak background volumes - i.e. school traffic was not included in the analysis. Given that no additional traffic was added to the field-collected or projected data, there is no rational nexus to assign the necessity of these improvements to the proposed high school.

Comment 1: Section 2-1204 (C), (D) & (E) Yards – Show the required yards on the Special Exception Plat. The “Zoning Setbacks” table on Sheet C1.0 should be renamed, due to the fact that no setbacks are required, only yards. References to setbacks within the table text should be removed. Additionally, a rear yard is incorrectly listed within the table. As the lot is considered a through lot, there is no rear yard, but two front yards (along the roads) and two side yards. Correct the table.

Response: The recommended changes have been incorporated.

Comment 2: Section 2-1204(F) Building Height – Provide the exact height of the proposed buildings, or, alternately, simply reference that the maximum height of buildings will be thirty-five feet.

Response: The recommended change to reference that the maximum height of the buildings will be 35 feet has been incorporated.

Comment 3: Section 2-1204(G) Minimum Open Space – Demonstrate that the 1% lot coverage maximum within Open Space has not been exceeded.

Response: A detailed open space calculation has been provided on the proposed special exception plat. Please reference Sheets C1.0 and C5.0. The 1% lot coverage maximum within the Open Space has not been exceeded.

Comment 4: Section 2 – 1206(C) (1) Provision of Sidewalks and/or Trails – Sidewalks and/or trails shall be provided, at a minimum, along one side of all streets. No sidewalk is shown along the frontage of Alder School Road.

Response: A pedestrian circulation plan has been added to the Special Exception sheets (Refer to Sheet C4.0) Per staff recommendation, a trail has been added along the frontage of Route 711. In order to minimize the impact to the floodplain, the trail has been placed on the south side of the floodplain and integrated into the school pedestrian network to serve both pedestrians along Route 711 and to provide access to the school facilities. In addition, the plan depicts the internal site circulation, the connection to the proposed Upper Loudoun Youth Football League trail system and the ultimate connection to the Town of Purcellville’s pedestrian access.

Comment 5: Section 2-1206 (C) (2) Sidewalk and/or Trail Connections – Connections should be made to all existing and/or planned sidewalk/trail systems adjacent to the property.

Response: Connections have been made to the planned trail system for the Upper Loudoun Youth Football League which ultimately connect to the Town of Purcellville pedestrian circulation system.

Comment 6: Section 5-1200 Off-Street Parking and Loading Requirements – Staff recommends the removal of the parking tabulations on Sheet C1.0. General Note 8 on the same Sheet should be updated to reference this Section.

Response: The recommended change has been incorporated.

Comment 7: Section 5-1400 Buffering and Screening – Indicate the location and type of buffering to be provided along the boundary of the use on the Special Exception Plat. Staff notes that the buffer table on Sheet C1.0 shows a rear buffer. As this lot is a through lot, there are no rear buffer requirements, but two front buffers (along the roads) and two side buffers instead.

Response: The recommended change has been incorporated and the type of yard corrected.

Comment 8: Section 5-1507 Noise Standards – Staff notes that the applicant is proposing a public address system within the proposed football stadium, the proposed high school baseball field and the proposed high school softball field. Noise emanating from this system cannot exceed 60 dBA at the property boundaries. Additionally, staff notes that the applicant has proposed to prohibit operation of the public address system after 12 a.m. Be advised that operation of the public address system between 11 p.m. and 7 a.m. would constitute a violation of §654.02(b)(1) of the Loudoun County Codified Ordinance, Revise the Issues for Consideration Responses and General Note 7 (on Sheet C1.0) accordingly.

Response: The recommended change has been incorporated.

Comment 9: Section 5-1508 Steep Slopes – Staff notes that County Records indicate no steep slopes on the subject parcel, yet the applicant references the presence of steep slopes in several areas. Please verify the information provided.

Response: The “steep slopes” previously shown on the plan were man-made due to road, pond and/or wetland construction. Since man-made slopes are not considered to be steep slopes for the purpose of the Zoning Ordinance, these designated areas have been removed from the plan.

Comment 10: Section 6-1310(E) Issues for Consideration – The layout of the site and the existing natural features do not mitigate all potential impacts of the proposed high school use upon adjacent residential uses. Discuss, in more detail, the measures that will be taken to mitigate the impacts on adjacent residential uses.

Response: In addition to the existing natural features and the proposed site layout, the proposed special exception plan complies with the zoning development standards including

landscape buffers along all special exception boundaries. It is proposed to enhance the buffering requirements to provide evergreen buffers between the proposed stadium and the residential properties to the east and between the active recreation areas and the residential out parcel located on Route 711. The stadium is provided with an increased setback and is further separated from properties to the east by the existing off-site floodplain. Lighting for the property will also be designed to minimize any impact to adjacent properties.

Comment 11: Section 6-1310(F) Issues for Consideration – Discuss the measures that are being taken, in terms of landscaping, screening and buffering, to mitigate the impacts upon adjacent parcels rather than simply referencing the plat.

Response: A Type 2 buffer will be provided along the Special Exception boundaries. In addition, an evergreen buffer is proposed east of the stadium (between the stadium and the residential properties to the east) and along the side and rear boundaries of the residential out-parcel that is situated on Route 711.

Comment 12: Sections 601310(J) & (O) Issues for Consideration – Discuss the traffic expected to be generated by the proposed use and how this traffic will be adequately and safely served by roads, pedestrian connections and other transportation services, rather than simply referencing the submitted traffic analysis.

Response: A detailed traffic analysis has been prepared for the proposed 1600 student capacity high school. The traffic study scoping was established in conjunction with the Loudoun County Office of Transportation and the Town of Purcellville. The study analyzed the existing and projected future traffic conditions, specifically for 19 intersections within the study area. The proposed school is to be located on Alder School Road, east of Route 690 and will share an entrance with Mountain View Elementary School. Given the start and end times for the elementary and high school, the traffic flows for the schools will not overlap. The school bus route from Harmony Intermediate will be via Route 7 at the middle school to Route 287 north, to Hirst Drive west, to Route 611 north, to Alder School Road west, and into the school entrance.

It is projected that the use will generate 2,736 average daily trips with entry and exit peak flows of 452/204 for the A.M. and 143/305 for the P.M. The peak a.m. and peak p.m. hours for the school use are off set from commuter peak hours. The study recommends road improvements within the study area for both school related and non-school related traffic (Reference pages 19-20 of the Traffic Analysis dated May 30, 2006.) For the school related traffic, the study recommends improvements to five intersections. Improvements for eight additional intersections are recommended to meet the needs of existing and/or background traffic. The latter improvements are considered to be necessary with or without the school. Preliminary design for the school related improvements is underway. Loudoun County Public Schools will work with the County to determine the appropriate implementation and funding for the recommended school related improvements. Safe and adequate access can be provided to the proposed high school.

A pedestrian plan has been added to the Special Exception Plat. This plan illustrates the proposed internal pedestrian network and depicts the connection to the Upper Loudoun Youth Football League (ULYFL) pedestrian system. Ultimately, the ULYFL pedestrian ways connect to the Town's sidewalk system.

School bus service will, of course, be provided to the school. The existing western Loudoun Valley High School is presently served by approximately 80 buses. With the pairing of middle and high schools and the additional of this (HS-3) high school at Fields Farm, it is projected that the new school will be served by approximately 40 buses. Essentially, the western Loudoun student population will be split between the two high school facilities.

Please reference the traffic study for additional details.

Comment 13: Sections 6-1310(K) & (S) Issues for Consideration – It is incorrect for the applicant to state that these issues are not applicable. If the applicant is not going to preserve structures and does not anticipate the generation of offensive odors as part of the proposed use, these facts should be stated.

Response: It is proposed to remove the existing structures. It is anticipated that the use will not generate any offensive odors.

Comment 14: Section 6-1310(M) Issues for Consideration – The applicant states that no adverse impact on the groundwater supply is anticipated, yet the project is to be supported entirely by well water. Discuss what is to be done to counteract the impact upon the current groundwater supply.

Response: A Preliminary Hydrogeologic Evaluation has been prepared for the Fields Property by Triad Engineering, Inc. This September 8, 2006, report provides an assessment of the site's groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity.

A water budget was developed for the site by comparing the anticipated annual groundwater withdrawal to an estimated annual groundwater recharge. The water demand at the site is the combination of the existing elementary school demand, the proposed high school usage, the proposed ULYFL demand and the proposed irrigation for sports fields. Relative to groundwater recharge, the budget is conservative assuming only groundwater recharge via precipitation that falls on the site. The budget does not take into account potential off-site groundwater recharge to the site and ignores groundwater recharge via the existing and proposed on-site septic systems and sports field irrigation. The anticipated annual water usage at the site is estimated at 7.1 million gallons per year. The estimated median and drought condition annual recharge to the site is 32 million gallons per year and 20.8 million gallons per year respectively. As such the water recharge is in excess of water extraction, even conducted conservatively and even in years of severe drought. (Pages 8-9 of the Hydrogeological Evaluation)

Phase I and II Environmental Site Assessments were completed for the site by Earth Tech in June and September of 2000. Triad completed an updated Phase I dated July 24, 2006. Identified site conditions of concern have been addressed. Existing septic systems (2) and a pit privy associated with the on-site residences will be properly abandoned in accord with Health Department requirements. The Health Department has issued the necessary permits for the abandonment of the existing wastewater systems and wells (that served the farm house). These permits were issued on November 8th and 9th.

(Pages 15-16)

The Preliminary Hydrogeologic Evaluation states that high yield wells are feasible at the site. (Page 13) The Health Department has issued permits for the well installation (November 8, 2006). The proposed well locations have been approved by the Health Department and drilling was accomplished in late November. The next steps are to schedule the Health Department inspection of the well grouting activity, to conduct a drawdown test and sampling of the water quality and to prepare a well report. In order to evaluate the potential impacts of proposed groundwater extraction to the existing Elementary School water supply, nearby domestic groundwater users, the site spring and nearby surface water bodies that receive groundwater discharge, groundwater drawdown and recovery tests will be conducted on any potential supply well as required by the County and State Health Departments. These tests are projected to occur in late December/early January. (Page 16)

Comment 15: Section 6-1310 (R) Issues for Consideration – The applicant should specifically reference the studies that have been done to demonstrate the fact that adequate on-site water and wastewater systems will be available.

Response: On August 11, 2006, a “Basis of Design Report” prepared by Bury + Partners was filed with the Loudoun County Sanitation Authority (LCSA). The purpose of the report was to provide information on the proposed wastewater treatment and subsurface disposal system that is to serve the proposed Field’s Farm High School.

On November 1, 2006, the Preliminary Engineering Report prepared by Bury + Partners was submitted to LCSA and the Loudoun County Health Department. It is projected that the Final Engineering Plans and Specifications for the proposed wastewater treatment and subsurface disposal system will be filed in January.

A Preliminary Hydrogeologic Evaluation prepared by Triad was filed with the Health Department on September 8, 2006. This report provides an assessment of the site’s groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity. The Preliminary Hydrogeologic Evaluation states that high yield wells are feasible at the site.

Comment 16: Section 6-1310 (T) Issues for Consideration – Specifically address what will be done to mitigate the impact of construction traffic upon the surrounding neighborhoods.

Response: The Fields Farm property has access from Alder School Road via Route 690 and Route 611. Construction traffic would travel on these roadways and not go through interior neighborhood streets. The residential properties in the area are typically large lot and for the most part, homes sit back from the road. The project would adhere to all regulations set forth in the Virginia Erosion and Sediment Control Handbook with special attention to be given to regulation VR625-02-00, minimum standard 17 relating to keeping public roads clean (keeping dirt and tracking off the roads). Loudoun County Public Schools will work with our contractors to minimize heavy construction traffic during peak traffic periods and request that significant deliveries arrive prior to or after the peak school bus routing times.

Comment 17: On Sheet C3.0 add a label within the legend for the evergreen trees shown within the additional 15' evergreen buffer.

Response: The recommended change has been incorporated.

Comment 18: Highlight the area subject to this Special Exception within the Vicinity Map on Sheet C0.0

Response: The recommended change has been incorporated.

Comment 19: Within the Zoning Requirements table, clarify the fact that the portion of the subject parcel that is zoned M-1 is located within the Town of Purcellville.

Response: The recommended change has been incorporated.

Comment 20: Provide maximum building square footages within the gross square footage and building coverage tables on Sheet C1.0 rather than the approximations currently provided.

Response: The recommended change has been incorporated.

Comment 21: Storage buildings, ticket stands, dugouts, etc. are referenced within the application materials, yet none of these buildings are labeled on the Special Exception plat. Label all referenced structures.

Response: The recommended change has been incorporated.

Comment 22: Staff notes that a possible drain field location is within the conceptual alignment for the Purcellville Route 7 North Collector Road.

Response: This potential drain field has been removed.

Comment 23: Several of the elevations submitted for the high school building lack labeling. Submit elevations which contain labels.

Response: The elevations have been revised to incorporate labeling as recommended.

Comment 24: Staff notes that there is no sidewalk/trail leading into the football stadium from either of the parking lots adjacent to it. Staff also notes a lack of sidewalks/trails to the tennis courts and practice fields at the southern end of the property.

Response: As a part of this resubmission a pedestrian plan has been incorporated to demonstrate access at the proposed high school facility. Pedestrian access between the football stadium and parking as well as access to the tennis courts and practice fields has been illustrated.

Comment 25: Clarify within the adjacent owners table on Sheet C1.0 that only adjacent owners along the side property lines are listed.

Response: The adjacent owners table on Sheet C1.0 has been amended to incorporate all of the surrounding property owners.

Comment 26: Conditions of Approval

- Staff recommends the inclusion of a condition requiring substantial conformance with the Special Exception Plat, to aid in the case of administration.
- Staff recommends a condition requiring the proposed enhanced buffers along the northern and eastern property lines
- Staff recommends a condition requiring that site, building and parking lot lighting shall be designed and constructed with cut-off and fully shielded fixtures so that the light will be directed inward and downward toward the interior of the property, away from adjacent streets and properties.
- Staff recommends a condition requiring that parking lot lighting shall be turned off within one hour following the end of evening activities, or 12 a.m. whichever occurs first.
- Staff recommends a condition requiring that athletic field lighting be directed inward and downward toward the fields. Athletic field lighting shall incorporate a reflector technology system that directs light onto the field and minimizes glare and spillage.
- Staff recommends a condition requiring that installation of the outdoor public address system be limited to the stadium/track and the high school baseball and softball fields. Noise emanating from this system cannot exceed 60 dBA at the property boundaries and use of the system shall be prohibited after 11 p.m.
- Staff recommends a condition requiring the proposed 50 foot floodplain conservation buffer.

Response: The applicant acknowledges and accepts the proposed conditions.

**Department of Building and Development
Environmental Review Team
Comments dated September 11, 2006**

Comment 1: The minor floodplain that bisects the school site is a headwater tributary to the South Fork Catoctin Creek. Staff recommends that the school construction include a reforestation plan for the river and stream corridor of the minor floodplains on site.

The county arborist provides herein more specific reforestation guidance: (Reference ERT referral)

Response: Loudoun County Public Schools will work with our wetland consultants and the County Arborist to review the minor floodplain area to determine how best to enhance this area.

Comment 2: Unlike previous special exception applications for school construction, no SWM or BMP design is depicted in plan view. Staff encourages commitments to infiltration BMP approaches that will help maintain the hydrologic cycle of this property, consistent with the low impact design practices recommended in Section 5.200 of the Facilities Standards Manual.

Response: The design standards and provisions of the most current VDOT Drainage Manual, Virginia Erosion and Sediment Control Handbook, Virginia Stormwater Management Handbook and the Loudoun County Facilities Standards Manual Chapter 5 will be utilized in the design of the Stormwater Management and Best Management Practices (BMP) for the High School Site Plan. As shown on sheet C3.0 there will be three kinds of low impact design practices utilized, Enhanced Extended Detention Basin, Extended Detention Basin and Bioretention Basins. These practices will be utilized to facilitate and enhance the pollutant removal from stormwater runoff by means of gravitational settling, wetland plant uptake, absorption, physical infiltration, decomposition and evaporation. The design of the site SWM and BMP will utilize the performance based water quality calculation and exceed the removal requirement for post-developed pollutant load.

Comment 3: As of this date, no hydrogeologic assessment of potential well water supply has been submitted for review by county staff. Regardless of estimated water yield, county staff encourages installation of water conservation measures into the school design, including a collection system for rainfall that falls on rooftops and installation of low flow toilets and no flow urinals in restrooms. Including water conservation measures within the school would establish a positive example of efficient water use in an area of the county with limited water resources and would be consistent with the Public Facilities goal language.

Response: A Preliminary Hydrogeologic Evaluation has been prepared for the Fields Property by Triad Engineering, Inc. This September 8, 2006, report provides an assessment of the site's groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity.

A water budget was developed for the site by comparing the anticipated annual groundwater withdrawal to an estimated annual groundwater recharge. The water demand at the site is the combination of the existing elementary school demand, the proposed high school usage, the proposed ULYFL demand and the proposed irrigation for sports fields. Relative to groundwater recharge, the budget is conservative assuming only groundwater recharge via precipitation that falls on the site. The budget does not take into account potential off-site groundwater recharge to the site and ignores groundwater recharge via the existing and proposed on-site septic systems and sports field irrigation. The anticipated annual water usage at the site is estimated at 7.1 million gallons per year. The estimated median and drought condition annual recharge to the site is 32 million gallons per year and 20.8 million gallons per year respectively. As such the water recharge is in excess of water extraction, even conducted conservatively and even in years of severe drought. (Pages 8-9 of the Hydrogeological Evaluation)

In 2003-004, Loudoun County Public Schools placed no flow urinals in the Douglas Support facility. We encountered extensive maintenance issues, odor control issues and increased expense for the required chemicals. Ultimately, the no flow urinals were replaced. The proposed school will utilize low flow toilets which will result in water conservation.

Department of Fire, Rescue and Emergency Management
Comments dated September 14, 2006

Comment 1: The plans show two possible emergency only access points to the school property with a chain and bollard barricade. We respectfully request that the applicant would consider a different method to limit the use of the emergency driveway. Staff is available to provide some suggestions that will ensure timely response of emergency vehicles while maintaining the intent of emergency only use of the driveway.

Response: The applicant will work with the Department of Fire, Rescue and Emergency Management to review alternative treatments for the emergency access driveway.

Parks, Recreation and Community Services
Comments dated September 15, 2006

Comment 1: The Department of Parks, Recreation and Community Services has enjoyed a long-standing collaboration with Loudoun County Public Schools that allows the use of certain school facilities for PRCS programs. We appreciate that cooperative agreement and hope it continues since it is clearly consistent with the Revised General Plan policy that states school sites should be "community assets and the focal point for active recreation and after-school programs".

PRCS would not be in objection to a favorable recommendation for approval on this application.

Response: Loudoun County Public Schools likewise desires to continue the cooperative agreement with Parks and Recreation.

Town of Purcellville

Comments dated September 18, 2006

Commission Permit

Comment 1: A Commission Permit from the Purcellville Planning Commission is necessary for location of this high school at Fields Farm. The Purcellville Director of Planning and Zoning (the Director) determined on May 24, 2006 that a high school is not a "feature shown" on or in the vicinity of Fields Farm within the PUGAMP plan and, thus, in conformance with Virginia Code Section 15.2-2232, that a commission permit is required to locate a high school on Fields Farm. The Director also believes that, since PUGAMP is a jointly adopted comprehensive plan in accordance with the Town/County Annexation Agreement and Virginia Code Section 15.2-2231, both the Town and Loudoun County Planning Commissions must approve a commission permit for the high school at this location.

Response: On August 15, 2006, the Purcellville Board of Zoning Appeals considered an appeal of the above cited Director's May 24, 2006 letter and on August 30, 2006, determined that the Town has no jurisdiction on land outside of the Town boundaries. On September 28, 2006, the Loudoun County Board of Zoning Appeals upheld the Loudoun County Zoning Administrator's June 22, 2006 determination which stated that the proposed high school is a feature shown on the Comprehensive Plan and that a Commission Permit is not required for this use and further that in the unincorporated areas of the County, including PUGAMP, there is no requirement for concurrence by the Towns, including Purcellville. The Town of Purcellville has appealed both the Town of Purcellville's and the County's BZA decisions to the Circuit Court.

Communal systems

Comment 2: No information has been provided concerning water & sewer facilities planned to serve the HS-3. The Town is very concerned that the county may propose sharing the existing utility facilities serving Mountain View Elementary School and/or approved for the Upper Loudoun Youth Football special exception with HS-3. Such shared facilities would constitute a communal system. PUGAMP prohibits the use of communal wastewater treatment systems and communal water supply systems in the JLMA. It further states that Purcellville will be the designated provider of municipal water and sewer service in the JLMA unless another provider is mutually agreed upon by the Town and the County.

Response: On August 11, 2006, a "Basis of Design Report" prepared by Bury + Partners was filed with the Loudoun County Sanitation Authority (LCSA). The purpose of the report was to provide information on the proposed wastewater treatment and subsurface disposal system that is to serve the proposed Field's Farm High School. The proposed system will collect the wastewater from the school by gravity collection to a pump station where it would be transferred to a pre-treatment system. From the pre-treatment system, the effluent will flow to the drainfield dosing tanks and the wastewater would be pumped to a drip irrigation disposal

field. The primary drip irrigation absorption field will be approximately 3.6 acres in size with an additional reserve area. The Basis of Design Report evaluated three options for the pre-treatment system. The system will be owned by Loudoun County Public Schools (LCPS) but LCSA will operate the facility. Comments on the Basis of Design Report were provided by LCSA on October 4, 2006.

On November 1, 2006, the Preliminary Engineering Report prepared by Bury + Partners was submitted to LCSA and the Loudoun County Health Department. The local Health Department has forwarded the Engineering Report to the State Health Department for comments. The preliminary engineering conference is held after submission of the Preliminary Engineering Report and tentatively scheduled for December 12, 2006. Comments on the Report are anticipated in 30+ days. Upon receipt of the Health Department and LCSA comments, the final design can be prepared. It is projected that the Final Engineering Plans and Specifications for the proposed wastewater treatment and subsurface disposal system will be filed in January.

A Preliminary Hydrogeologic Evaluation prepared by Triad was filed with the Health Department on September 8, 2006. This report provides an assessment of the site's groundwater quantity and quality and provides information relative to water needs for the existing and proposed uses in relation to potential groundwater recharge, existing groundwater quality, and potential risks to groundwater quality and quantity. The Preliminary Hydrogeologic Evaluation states that high yield wells are feasible at the site. (Page 13) An on-site meeting with the Health Department, Triad, the well driller and LCPS was held on October 5, 2006. The proposed well locations have been approved by the Health Department and the Health Department has issued permits for the well installation (November 8, 2006). Drilling was accomplished in late November. The next steps are to schedule the Health Department inspection of the well grouting activity, to conduct a drawdown test and sampling of the water quality and to prepare a well report. These activities are projected to be accomplished by early January.

The water and wastewater facilities for the proposed high school will be separate and distinct from those serving the elementary school and the Upper Loudoun Youth Football League. PUGAMP policies also provide that the policy for central sewer and water is in no way intended to limit the development of uses on individual well and septic systems as permitted in the JLMA under existing zoning.

Statement of Justification

Comment 3: The Town disagrees with the assertion that the proposed HS-3 is consistent with PUGAMP, a comprehensive plan jointly adopted by the Town and the County. See our comments #1 and 2 above for explanation of our disagreement.

Response: Please reference response under Comments #1 and 2 above.

Comment 4: Of open space assets (Group 3), the Statement of Justification says,

“Facilities provided at the school site will afford active recreational opportunities for the community.” The applicant should specify which school facilities would be available for community use and under what conditions. For example, the track and football field at Loudoun Valley High School are currently off limits to the community.

Response: For all school facilities, first priority is given to students and then the facilities are made available for scheduled use. Loudoun County Public Schools and the Parks and Recreation Department have a long standing relationship in the shared use of facilities. Use may be scheduled through the athletic directors at the school or through the Department of Parks and Recreation activities. The new high school facilities will be made available to the community in this same manner.

Comment 5: For the section concerning adequate service by essential public facilities and services (Group 4, paragraph L) and the section concerning adequate infrastructure (Group 4, paragraph R), the provision of water and sewer utilities is not adequately addressed. There should be a complete description of these systems, the proposed operator, and, perhaps as part of the paragraphs addressing conformance with the comprehensive plan, a justification of the systems with regards to PUGAMP.

Response: Please reference response under Comment #2 above.

Comment 6: For the section concerning anticipated odors that may impact adjacent landowners (Group 4, paragraph S), it is possible that the septic drainfields could make an offensive odor. Have Health Department approvals of the three proposed uses of the drainfields been issued?

Response: The drainfields will receive water that is treated to secondary standards, which is higher than conventional septic tank effluent. Therefore, the water will not have any discernable odor. The Health Department has approved the Mountain View Elementary School drainfields which are currently being utilized per the operating permit issued by the Health Department. The soil work performed for the HS-3 drainfields has also been submitted and approved by the Health Department. There is drainfield area on the Fields Farm property approved and available for use by the Upper Loudoun Youth Football League. The Board of Supervisors has approved the use of pump and haul for the ULYFL. Should the ULYFL desire to install a septic system in the future, they would need to secure a permit through the Health Department to utilize the available drainfield area.

Traffic Impact Analysis

Comment 7: It would be helpful to have more information (projected hours of operation, projected number of buses servicing both schools, projected number of parking spaces for students and faculty, projected number of faculty and staff, etc.) about this proposal. We assume that the sports fields included on the HS-3 site will generate traffic during a significant number of evenings, but we do not see that in the traffic impact analysis. Information about the existing Mountain View Elementary School would also be helpful to understand how the two schools' transportation activities will interact. For the same

reason, information about the Loudoun County Parks and Recreation Services/Upper Loudoun Youth Football League facilities, including but not limited to the projected number of parking spaces would be helpful.

Response: Classes at Mountain View Elementary School begin at 7:50 a.m. and are dismissed at 2:35 p.m. Presently there are eighteen buses providing transportation to the school. The student enrollment as of 9/29/06 was 763 and the building program capacity is 770. There are 81 faculty/staff. There are 113 parking spaces.

The 2006-0007 high school class start time is 8:55 to 9:00 a.m. and dismissal is 3:43-3:48 p.m. It is projected that the proposed high school at Fields Farm would have similar class hours and that approximately 40 buses would provide transportation to the school. The student capacity of the building is proposed at 1600 and the projected number of faculty/staff is 200. The Special Exception Plan provides for 1,025 parking spaces.

Because the class start and dismissal times for the elementary and high school are an hour apart there should be minimal interaction between the two. As with all Loudoun County public schools there will be activities held in the evenings and on weekends. The primary use is the peak class time which is what was utilized for the traffic analysis.

The Special Exception Conditions for the Upper Loudoun Youth Football League recreational facilities (SPEX 2004-0009) provides that the hours of operation shall be Monday through Saturday 8:00 a.m-11 p.m. and Sunday 11 a.m. to 11 p.m. The Special Exception Plat depicts 597 spaces, which may be adjusted upon final engineering requirements.

Comment 8: Was Mountain View Elementary School included in the traffic impact analysis?

Response: The traffic from Mountain View Elementary School was accounted for in the traffic study. The traffic data was collected in 2005 while school was in session between the hours of 7-9am and 2-4pm, these time periods cover this start and dismissal of Mountain View Elementary school.

Comment 9: Were the Loudoun County Parks and Recreation Services/Upper Loudoun Youth Football League facilities included in the traffic impact analysis?

Response: As a part of all traffic studies there is a requirement for a background traffic growth factor. The Loudoun County Parks and Recreation Services Upper Loudoun Youth Football League (ULYFL) facilities are reflected as a part of this annual growth assumption, which in this particular study was assumed at five percent. It should also be noted that the ULYFL facilities peak hours would not coincide with the peak hours (weekdays 7 am to 9 am and 2-4 pm) of this traffic analysis.

Comment 10: What assumptions were made for the proposed Harmony Elementary School? It would be helpful to see trip generation and trip assignments for this proposed

school.

Response: It was assumed that Harmony Elementary School would be in operation. A preliminary attendance zone for Harmony Elementary School was provided by LCPS and projected traffic volumes were added to the collected/projected background traffic volumes. Base on the attendance zone, the elementary school traffic will primarily utilize the Route 287 corridor.

Comment 11: It would be helpful to show a graphic, similar to Figure 2a, depicting the existing lane designations and which of the study area intersections are signalized.

Response: Figure 1 (attached) provides a graphic illustrating (1) which intersections were analyzed, (2) the type of traffic control present at each location, and (3) the existing roadway geometrics.

Comment 12: Have all trips associated with approved developments in the immediate vicinity that have not been built yet been included in the background traffic volumes?

Response: The purpose of including a background growth assumption is to incorporate anticipated growth. In this particular study, a 5% growth factor has been included.

Comment 13: Trip generation appears to be reasonable, but it might be helpful to supplement the ITE trip generation equations with local data from other Loudoun County high schools. This area's socioeconomic demographic is predominantly affluent and it would be expected that there would be more vehicles per household, which could result in a higher trip generation rate for students.

Response: Traffic data was collected at several local elementary, middle and high schools in the Loudoun area. This data was compiled and compared to the rates provide by the ITE Trip Generation Manual, 7 Edition. Tables 1A and 1B (attached) present a summary of data collection effort and a comparison with the ITE trip generation rates.

The original site-generated traffic estimates are shown on Figure 2 (attached)

A revised site-generated traffic estimate was prepared (see Table 1C). This data was also used as a basis to prepare Figure 3 (attached), which summarizes estimated school traffic at the analyzed intersections assuming the increased site-traffic based on the Loudoun County data. The Loudoun-specific trip generation rates resulted in a 218 vehicle trip increase during the AM peak and 151 vehicle trip increase during the PM peak. Given the distributed nature of the high school traffic, the additional impact to a majority of the intersections is minimal, equaling an additional 20-30 vehicles at most intersections. The most heavily impacted intersections are the Route 690/Allder School Road, Route 611/Allder School Road, and Allder School Road/HS Entrance intersections. With the proposed improvements, each of these intersections operate at LOS "C" or better, a full letter grade about the required minimum. It is not anticipated that the additional vehicle trips would result in unacceptable levels of service/operational conditions at these locations.

Comment 14: Was the number of proposed high school parking spaces factored into the proposed high school trip generation?

Response: No. The provided trip generation rates were calculated using the number of students as the independent variable.

Comment 15: While the schedules for the elementary school and the proposed high school are proposed to be staggered there will likely be activity from the elementary school during the high school peak hours. This activity should be included in the traffic volumes at entrance onto Route 711.

Response: Traffic data was collected between 7-9am and 4-6 pm. The peak hour during each of these periods was used for background traffic, not the hour that coincides with the start/dismissal time of the proposed high school. This approach provides a true "worst case scenario" with regard to background traffic.

Comment 16: It was not clear how the directional distribution assumptions were derived. It would be helpful to have a graphic showing where the school student population, separated by elementary school, middle school, and high school, is projected to be located.

Response: The directional distribution of traffic is based on the location of the potential student population and the available road network that links the students to the proposed high school. The location of the anticipated student population is based on 2005 enrollment figures. All students were geocoded utilizing ARC-INFO, thus providing accurate data based on each students residential location. The student populations for grades 6, 7, 8, and 9 were used as a basis for the location of the students who would potentially be attending HS-3 in the fall of 2008. This information is contained in Appendix B of the submitted traffic study.

Comment 17: It would be helpful to show a separate directional distribution for projected bus traffic. Are bus routes factored into total traffic? How about probable routes faculty and staff will take?

Response: It is anticipated that bus traffic will follow the route highlighted on Figures 2 and 3 (attached); this information was also shown on Figure 4 in the original traffic study. Bus routes were taken into consideration with regard to traffic flows and operations. The remaining site traffic was distributed based on the location of the student body within the attendance zone.

Comment 18: The 2008 total future conditions without improvements were not included in the capacity analyses. It would be helpful to see how the intersections are projected to operate without improvements.

Response: The delays and levels of service presented in the traffic study for the 2008 conditions assumed existing road geometries; the recommended turn lanes and traffic signals were not included in the analyses. Representatives from Loudoun County Transportation Services and the

Town of Purcellville did not provide any scheduled/potential roadway improvements during the preparation of the scoping agreement.

Comment 19: What was the basis for the recommended intersection improvements for the projected background traffic volumes? What is the status of these improvements? Are any of them funded or planned by the County or the Town? Were these improvements discussed with the County or the Town? [Obviously, this comment is from our consultant. At Business Route 7 and Route 287, the Town's preferred improvement is a roundabout, for which we have a conceptual design. The Town does not propose to fund this roundabout, or any other listed improvement, except for traffic signals at Business Route 7 and Hatcher Avenue and at Business Route 7 and 23rd Street.]

Response: The basis for the proposed improvements were (1) existing/projected background traffic volumes and (2) intersection delay. The guidelines for these recommendations are provided in the *VDOT Road Design Manual* (Appendix C), the *VDOT Land Development Manual*, and *F.S.M Traffic Study Guidelines* provided by Loudoun County's Office of Transportation Services (OTS).

Several of the recommended improvements are currently in preliminary design.

The Town has indicated above that it will fund a traffic signal at the Route 7/Hatcher Avenue intersection. This improvement was not recommended in the HS-3 traffic impact study.

Comment 20: It is unclear if the recommended intersection improvements with the build-out of the high school are being offered to be constructed with the school.

Response: The traffic study has recommended certain school related transportation improvements that should be done in conjunction with the construction of the high school. Those improvements, identified in the study as "school-related", are currently in preliminary design. These improvements/intersections are shown graphically on Figure 4 in the highlighted circles. Loudoun County Public Schools will work with the County of Loudoun to determine the appropriate funding and implementation of road improvements.

The remaining recommended improvements are related to background traffic volumes, indicating operational deficiencies which currently exist or will exist in 2008 even without traffic from the proposed high school. Loudoun County Schools does not anticipate funding these improvements.

Comment 21: It would be helpful to show a graphic depicting the proposed intersection improvements, both for the background and total future conditions.

Response: Figure 5 (attached) shows those intersection improvements which are warranted due to background traffic volumes. Figure 6 (attached) shows those improvements which are warranted by traffic generated by the proposed high school.

Comment 22: Our review did not examine the proposed improvements in detail due to our

questions about trip generation and trip assignment. We can provide this review once the assumptions and methodology items have been addressed. [Again, this is from our consultant.]

Response: No response required.

Comment 23: The Highway Capacity Manual (HCM) signalized and unsignalized reports were not used in the Synchro analyses; instead the intersection capacity utilization methodology reports were used. The HCM reports tend to have slightly more conservative results for delays and levels of service.

Response: Intersection Capacity Utilization provides a straight forward method to calculate an intersection's level of service. The method simply takes a sum of the critical movements' volume to saturation flow rates. ICU is an ideal solution for traffic planning purposes. Its intended applications are for traffic impact studies, future roadway design, and congestion management programs.

Comment 24: What assumptions were made for the traffic analyses? Were peak hour factors utilized? Were percent heavy vehicles adjusted for turning movements along the projected bus route? Were the existing traffic signal timing/phasing used?

Response: The assumptions are specified in the OTS scoping agreement and the traffic report itself. The default peak hour factors were utilized. Heavy vehicles (i.e. busses) were taken into consideration along the proposed bus route. Existing signal timings were used for 2006 conditions and 2008 background condition; these timings were modified/optimized for the 2008 total conditions.

The original scoping agreement with the Office of Transportation Services included 4 intersections in the immediate vicinity of the proposed high school. A revised study outline was presented to Loudoun County Public Schools by the Office of Transportation Services after soliciting input from the Town of Purcellville; the revised study outline included 18 intersections. The additional intersections requested specifically by the Town (via e-mail) were limited to the Main Street corridor.

Comment 25: Will the existing eastbound Route 711 right turn lane have enough storage length to accommodate the proposed high school traffic? How much storage should the recommended westbound Route 711 left turn lane provide? A queue analysis would be helpful to determine these lengths.

Response: Yes, there will be sufficient storage to accommodate right turning eastbound vehicles. The westbound left turn lane design includes 200' of storage and 200' taper. A queue analysis can not be performed on an unsignalized intersection.

26. Will the existing single egress lane from the Mountain View Elementary School adequately accommodate the both the elementary school and the proposed high school traffic? Has any consideration been given to providing an additional turn lane at the

driveway and/or additional access points? It would be helpful to have additional access points for special events such as emergencies or evening school events (football games, graduation, etc.).

Response: LOS analysis indicates the NB approach will operate at acceptable levels of service during both the AM and PM peak periods, assuming the presence of only one lane. The proposed Route 690 entrance will provide secondary emergency access; this 12' facility will not be open to the general public for daily use by school-related traffic.

Environmental Resources

Comment 27: How will stormwater runoff be managed?

Response: The design standards and provisions of the most current VDOT Drainage Manual, Virginia Erosion and Sediment Control Handbook, Virginia Stormwater Management Handbook and the Loudoun County Facilities Standards Manual Chapter 5 will be utilized in the design of the Stormwater Management and Best Management Practices (BMP) for the High School Site Plan. As shown on sheet C3.0 there will be three kinds of low impact design practices utilized, Enhanced Extended Detention Basin, Extended Detention Basin and Bioretention Basins. These practices will be utilized to facilitate and enhance the pollutant removal from stormwater runoff by means of gravitational settling, wetland plant uptake, absorption, physical infiltration, decomposition and evaporation. The design of the site Stormwater Management Facilities shall be provided with the High School Site Plan in the event that an adequate receiving channel for site runoff does not exist or can not be provided. These facilities will attenuate the post-developed peak runoff rates from the one and ten year storm events, considered individually, and release at or below the pre-developed level.

Comment 28: Has the impact on existing wetlands been assessed? Is the floodplain crossing properly addressed with both the U.S. Army Corps of Engineers and with Zoning Ordinance requirements?

Response: The impact to the existing wetlands area will be minimized with the site plan. The impact will be less than 300 linear feet and 0.1 acre. The impacts will occur at the floodplain crossing in the middle of the site. The floodplain crossing will require a FPAL study to be submitted and approved by Loudoun County Building and Development pursuant to Chapter 5 of the Facility Standards Manual.

Comment 29: Please provide Health Department approvals for the three proposed uses of the drainfields, including Mountain View Elementary School, the ULYFL/LCPRS recreation facility, and HS-3.

Response: The Health Department has approved the Mountain View Elementary School drainfields which are currently being utilized per the operating permit issued by the Health Department. The soils work performed for the HS-3 drainfields has also been submitted and

approved by the Health Department. There is drainfield area on the Fields Farm property approved and available for use by the Upper Loudoun Youth Football League. The Board of Supervisors has approved the use of pump and haul for the ULYFL. Should the ULYFL desire to install a septic system in the future, they would need to secure a permit through the Health Department to utilize the available drainfield area.

Historical Resources

Comment 30: Have the existing farm structures proposed to be demolished been surveyed for historical significance? We note that it appears that grading for the proposed stream crossing will destroy the stone springhouse and that HS-3 and its parking lot is proposed over the farmstead.

Response: A Phase I Archeological Investigation was conducted on the Fields Farm by Thunderbird Archeology in June of 2006. The Phase I study identified Site 44LD1393 located in the central portion of the Fields Farm property within the boundaries of the previously identified Virginia Department of Historic Resources (VDHR) resource 053-5596 (the abandoned farm complex). The archeological site was concentrated in the vicinity of the two older buildings in the northern portion of 053-5596. Because the archaeological site had the potential to provide information related to the 19th century lifeways of rural western Loudoun County, a Phase II study was recommended.

On July 19, 2006, History Matters, LLC conducted a reconnaissance-level survey of the existing farm structures. This report was submitted to the Virginia Department of Historic Resources (DHR). Based on the survey, History Matters concluded that the farm complex no longer retains its physical integrity.

VDHR reviewed the Phase I Investigation Report and the 2006 reconnaissance-level survey of the existing farm structures. VDHR recommended that Site 44LD1393 should either be avoided or subjected to a Phase II evaluation if avoidance is not feasible. With regard to the reconnaissance-level survey for the farm building complex VDHR concurred with the consultant's recommendation that the farm building deterioration render it unlikely that the resource would be considered eligible for inclusion in the National Register. No further investigation of the farm building complex was recommended.

In October of 2006, a Phase II Archaeological Evaluation was conducted on Site 44LD1393 by Thunderbird Archeology. The investigation found that almost all of the artifacts were recovered from disturbed contexts. The site is not considered to be eligible for listing on the National Register of Historic Places and no further archeological work is recommended.

Copies of the Phase I, Phase II, the 2006 reconnaissance-level survey of the existing farm structures and the VDHR letter of September 6, 2006 are submitted with this referral response.

Community Planning
Comments dated September 22, 2006

Comment 1: State any future intentions for the North Collector Road, including whether the applicant intends to contribute to its construction, and whether access will ultimately be provided to the road.

Response: The only potential future connection to the North Collector Road would be for a secondary emergency access to the high school. A primary road connection would interfere with the on-site athletic program facilities. LCPS does not propose to construct nor contribute to the future construction of the North Collector Road as this road is not planned to serve the use.

Comment 2: Commit to using an infiltration BMP on site and using low impact development techniques, per Plan policy.

Response: The design standards and provisions of the most current VDOT Drainage Manual, Virginia Erosion and Sediment Control Handbook, Virginia Stormwater Management Handbook and the Loudoun County Facilities Standards Manual Chapter 5 will be utilized in the design of the Stormwater Management and Best Management Practices (BMP) for the High School Site Plan. As shown on sheet C3.0 there will be three kinds of low impact design practices utilized, Enhanced Extended Detention Basin, Extended Detention Basin and Bioretention Basins. These practices will be utilized to facilitate and enhance the pollutant removal from stormwater runoff by means of gravitational settling, wetland plant uptake, absorption, physical infiltration, decomposition and evaporation. The design of the site SWM and BMP will utilize the performance based water quality calculation and exceed the removal requirement for post-developed pollutant load.

Comment 3: Provide a bicycle and pedestrian trail connection between the football stadium and the large high school parking lot, with a span-style boardwalk or bridge incorporated into the design of the trail over the floodplain.

Response: Parking for the football stadium is provided in proximity to the stadium. Should the large high school parking lot be utilized during football games or other stadium events, there is a sidewalk along the internal roadway that will provide pedestrian access to the stadium. As a part of this resubmission, a pedestrian plan has been prepared to demonstrate the access for the proposed high school facilities.

Comment 4: Provide an 8 – 10 foot wide multi-purpose trail along the site frontage of Route 711 and Route 690 to connect the Fields Farm Property with the Town of Purcellville.

Response: A pedestrian circulation plan has been added to the Special Exception sheets (Refer to Sheet C4.0) Per staff recommendation, a trail has been added along the frontage of Route 711. In order to minimize the impact to the floodplain, the trail has been placed on the south side of the floodplain and integrated into the school pedestrian network to serve both

pedestrians along Route 711 and to provide access to the school facilities. In addition, the plan depicts the connection to the proposed Upper Loudoun Youth Football League trail system and the ultimate connection to the Town of Purcellville's pedestrian access. The proposed high school does not access Route 690.

Comment 5: Provide sidewalks on both sides of all roads to ensure easy access for pedestrians traveling between the high school and associated facilities.

Response: Please see response to Comment 4 above. Sidewalks have been provided to ensure easy access for pedestrians.

Comment 6: Commit to the following lighting measures as conditions of approval:

- That site, building, and parking lot lighting be designed and constructed with full cut-off and fully shielded fixtures so that the light will be directed inward and downward toward the interior of the property, away from adjacent streets and properties, is confined to the site, and has illumination levels that are no greater than necessary for a light's intended purpose;
- That parking lot lighting be turned off within one hour following the end of evening activities, or 12 a.m., whichever occurs first; and,
- That athletic field lighting be directed inward and downward toward the fields and that athletic field lighting incorporate a reflector technology system that directs light onto the fields and minimizes glare, spillage, skyglow, and deterioration of the nighttime environment.

Response: LCPS acknowledges and agrees to these recommendations.

Comment 7: Commit to a public address system which will not cause disruption to nearby residents.

Response: The public address system will comply with all County requirements.

Comment 8: Provide information regarding the well and wellhead protection, depth of wells, location of neighboring wells, and whether they are up gradient from septic fields.

Response: As documented in the Loudoun County Health Department Well/Water Permit, the supply well will be constructed as a Class I well and shall be cased and grouted to bedrock plus 10 feet or a minimum cased 100 feet and grouted 100 feet, whichever is greater. The well is designed as an 8 inch well, and in accordance with local and state requirements the internal diameter of the casing shall be 7.981 inches, with an external diameter of 8.625 inches. At depths greater than the casing length, the well shall be an approximate 8 inch open borehole. The Preliminary Hydrogeologic Evaluation indicates that high yield fractures are apparent at depths in excess of 500 feet, and as such, target well depths as great as 1,000 feet will be considered during well installation (page 14).

The potential well locations approved by the Loudoun County and Virginia Health Departments were chosen based upon water quality and quantity considerations outlined in the Preliminary Hydrogeologic Evaluation, and as such, wellhead protection was considered during the well location selection process. In order to maintain wellhead protection, and in accordance with County requirements, a 100 foot radial well lot shall be established with no structures or potential pollutant sources permitted within the well lot except for approved pumping and/or water treatment facilities (i.e., based upon current design, the pumping and water treatment facilities are outside of the well lot).

The location of neighboring wells are depicted on Plates A-11 and A-12 of the Preliminary Hydrogeologic Evaluation.

There are no existing or proposed septic fields located between the potential well locations and the nearest topographically down-gradient surface water body; and as such, the proposed well locations are not considered up-gradient from septic fields.

Comment 9: Implement water conservation measures to protect water quality, pursuant to Plan policy of ensuring protection from contamination and maintaining an adequate level of drinking water for residents.

Response: The potential well locations approved by the Loudoun County and Virginia Health Departments were chosen based upon water quality and quantity considerations outlined in the Preliminary Hydrogeologic Evaluation, and as such, wellhead protection was considered during the well location selection process. In order to maintain wellhead protection, and in accordance with County requirements, a 100 foot radial well lot shall be established with no structures or potential pollutant sources permitted within the well lot except for approved pumping and/or water treatment facilities (i.e., based upon current design, the pumping and water treatment facilities are outside of the well lot).

There are aspects of the site design that will help maintain water quality and quantity at the site, including:

- The on-site re-infiltration of treated wastewater and sports field irrigation water, where the pretreatment of the wastewater will be completed to ensure water quality, and the re-injection of that water on-site will help maintain water quantity;
- The conservation of the on-site floodplain and wetlands, and design of appropriate storm water facilities to protect water quality; and
- The use of low-flow toilets to reduce water use at the school.

Comment 10: Provide additional information regarding drainfields on site, including information on capacity, water gradients, locations, and measures taken to preclude contamination of nearby wells, whether the drainfields are shared with the elementary

school, and whether a drainfield is proposed in the conceptual alignment for the North Collector Road.

Response: The drainfields for the elementary school and the high school are separate systems and are not shared. The Mountain View Elementary School subsurface disposal system is sized for 8,000 gpd. In addition, there is a 100% reserve area. The HS-3 subsurface disposal system is sized for 23,400 gpd. In addition, there is a 100% reserve area. The Upper Loudoun Youth Football League has been approved for permanent pump and haul but must demonstrate that there is drainfield area available should they desire to install a septic system in the future. There is approved drainfield area on the site that the ULYFL could utilize if desired. The ULYFL would need to apply for the appropriate permits through the Health Department. The drainfield locations have been added to the Special Exception plat for easy reference. The drainfield area that had previously been shown at the conceptual alignment for the North Collector Road has been eliminated.

Please refer to Comment 8 response above for information on well protection.

Comment 11: Depict drainfields on the SPEX plat as “drainfields”, omitting the word “possible”.

Response: The recommended change has been incorporated.

Comment 12: Reinspect the previous restoration effort along the stream corridor to determine the state of the tree shelters. If needed, refer to guidance from Building and Development regarding the augmentation of that effort.

Response: Loudoun County Public Schools will work with our wetland consultants and the County Arborist to review the minor floodplain area to determine how best to enhance this area.

Comment 13: Reforest the remainder of the riparian corridor on site, from the northern property line to the southern property line.

Response: Loudoun County Public Schools will work with our wetland consultants and the County Arborist to review the minor floodplain area to determine how best to enhance this area.

Comment 14: Submit a reforestation plan for staff’s review.

Response: Loudoun County Public Schools will work with our wetland consultants and the County Arborist to review the minor floodplain area to determine how best to enhance this area.

Comment 15: Ensure that the river and stream corridor resources between Route 711 and the football stadium are not impacted by parking or vehicular traffic.

Response: LCPS will ensure that the river and stream corridor resources between Route 711 and the football stadium are not impacted by parking or vehicular traffic.

Virginia Department of Transportation

Comment:

This Office supports the recommended improvements on Page 20 of the Traffic Impact Analysis dated May 30, 2006. Prior to considering a roundabout for the Route 690/Alder School Road intersection, the availability of right of way should be evaluated.

Response: Acknowledged

Comment:

Additional comments specific to the re-timing of signals as suggested in the analysis will be forthcoming from our Traffic Engineering section.

Response: No response necessary at this time.

Transportation Related Attachments:

Table 1A: Summary of Loudoun School traffic data collection

Table 1B: Trip Generation Comparison of Loudoun School traffic data and ITE rates

Table 1C: Trip Generation Estimates for 1600 Student HS

Figure 1: Existing Roadway Geometries

Figure 2: Original site-generated traffic volumes (ITE)

Figure 3: Loudoun School traffic data at analyzed intersections

Figure 4: Recommended Roadway Improvements

Figure 5: Background Related Improvements

Figure 6: High School Related Improvements

TABLE 1A
LCPS DATA COLLECTION SUMMARY

LCPS Summary Information - 1/28/08 to 3/2/06

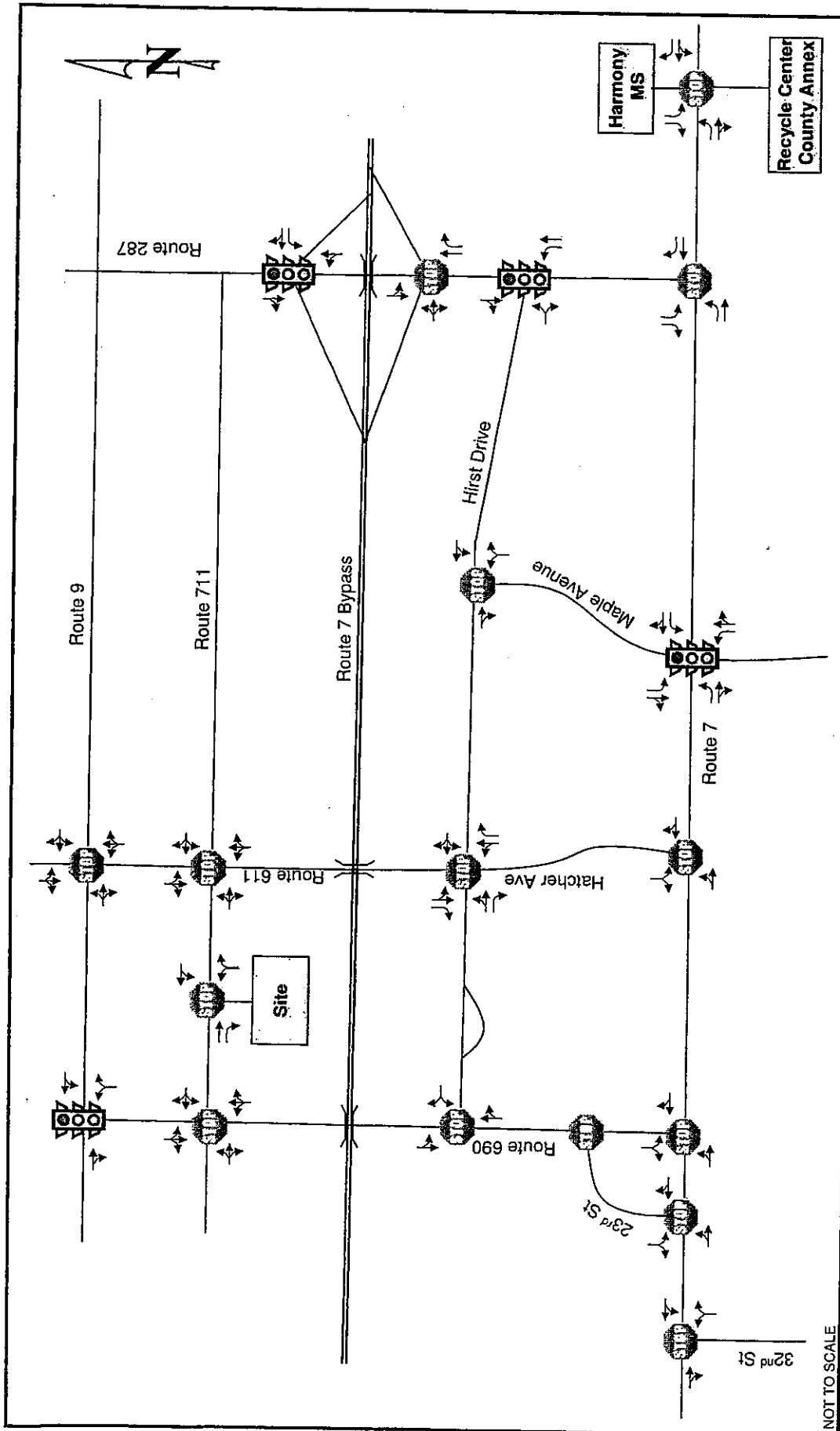
	Busses	AM Enter	AM Exit	PM Enter	PM Exit	# Students	AM Trips	Trips/Student	% Enter	% Exit	PM Trips	Trips/Student	% Enter	% Exit
Evergreen Mill Elementary	17	161	94	45	62	838	289.00	0.34	0.62	0.38	141.00	0.17	0.44	0.56
Lovettsville Elementary	12	106	87	38	54	465	217.00	0.47	0.54	0.46	116.00	0.25	0.43	0.57
Mountain View Elementary	18	159	124	40	78	709	319.00	0.45	0.55	0.45	154.00	0.22	0.38	0.62
Round Hill Elementary	9	162	134	46	67	510	314.00	0.62	0.54	0.46	131.00	0.26	0.42	0.58
Harmony Intermediate	77	208	170	100	136	1041	532.00	0.47	0.56	0.44	390.00	0.37	0.45	0.55
Blue Ridge Middle	75	227	161	77	165	1032	536.00	0.52	0.56	0.44	392.00	0.38	0.39	0.61
J.L. Simpson Middle	24	237	164	65	121	744	449.00	0.60	0.58	0.42	234.00	0.31	0.38	0.62
Heritage High	30	459	143	95	306	1502	682.00	0.53	0.56	0.44	461.00	0.32	0.41	0.59
Loudoun County High								0.44	0.74	0.26		0.31	0.27	0.73
Location 1			93		58									
Location 2		282	17	42	31									
Location 3	29		36		59									
Location 4		253	71	86	145									
	29	515	217	128	294	1244	790.00	0.64	0.69	0.31	480.00	0.39	0.33	0.67
Loudoun Valley High														
Location 1		130	11	14	25									
Location 2	82	232	26	60	170									
Location 3		172	77	32	155									
	82	534	114	106	350	1440	812.00	0.58	0.76	0.24	620.00	0.43	0.30	0.70
								0.55	0.73	0.27		0.37	0.30	0.70

TABLE 1B
TRIP GENERATION COMPARISON: LCPS VS ITE

School Type	Trip Comparison LCPS vs ITE Averages					
	AM Peak			PM Peak		
	Trips/Student	% Enter	% Exit	Trips/Student	% Enter	% Exit
Elementary School						
ITE Average	0.42	0.55	0.45	0.28	0.45	0.55
LCPS Average	0.47	0.56	0.44	0.22	0.42	0.58
Middle School						
ITE Average	0.53	0.55	0.45	0.3	0.45	0.55
LCPS Average	0.53	0.56	0.44	0.32	0.41	0.59
High School						
ITE Average	0.41	0.69	0.31	0.28	0.32	0.68
LCPS Average	0.55	0.73	0.27	0.37	0.30	0.70

TABLE 1C
TRIP GENERATION ESTIMATES: 1,600 STUDENT HS

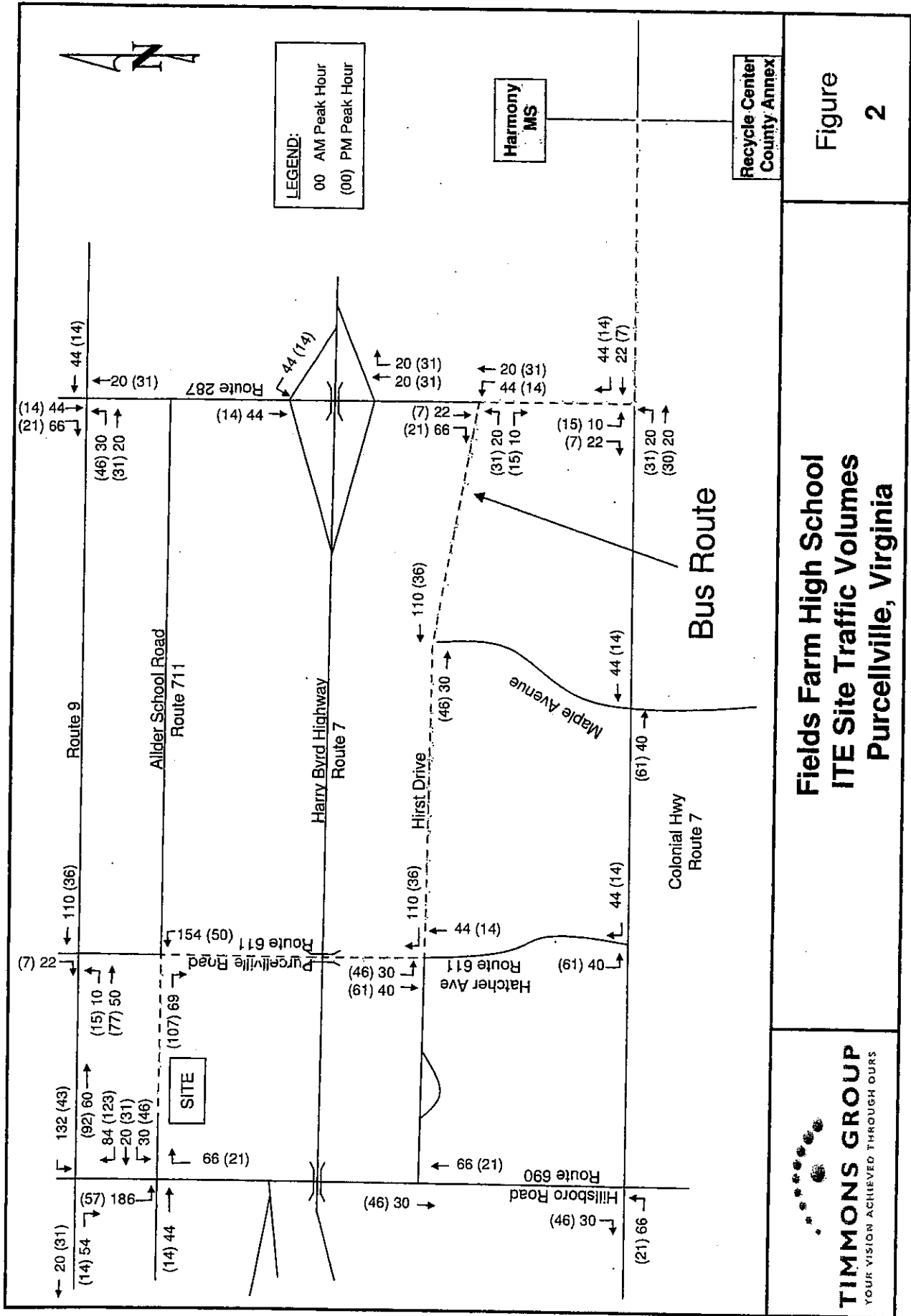
Comparison of High School Trip Generation Rates						
1,600 Student High School						
	AM Peak Trips			PM Peak Trips		
	Total	Enter	Exit	Total	Enter	Exit
ITE Average	656	453	203	448	143	305
LCPS Average	874	637	237	599	180	419
Difference	218	185	34	151	37	114



Route 711 HS
Existing (2005) Roadway Geometrics
Purcellville, Virginia

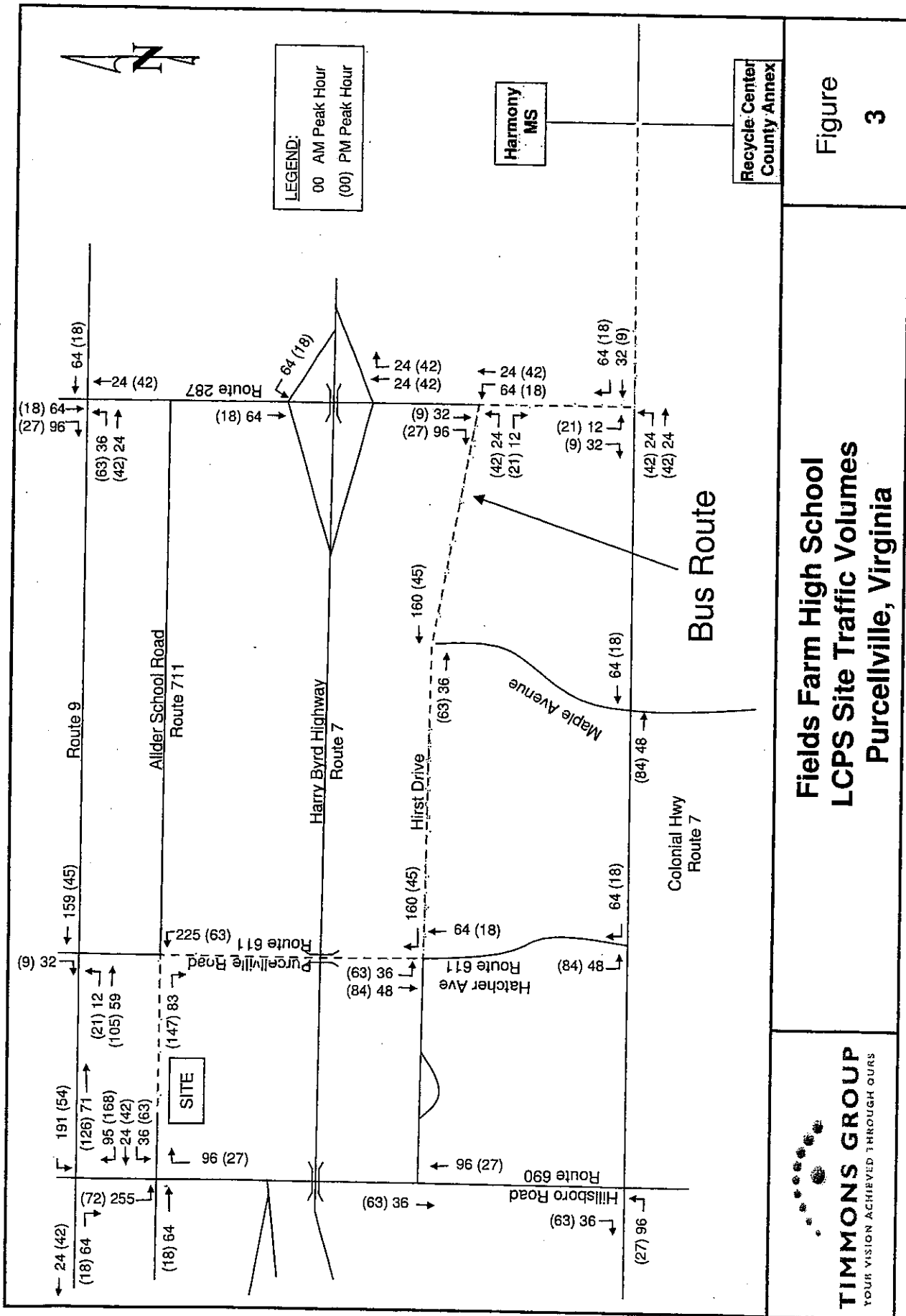
Figure
1

TIMMONS GROUP
 YOUR VISION ACHIEVED THROUGH OURS.



**Fields Farm High School
 ITE Site Traffic Volumes
 Purcellville, Virginia**

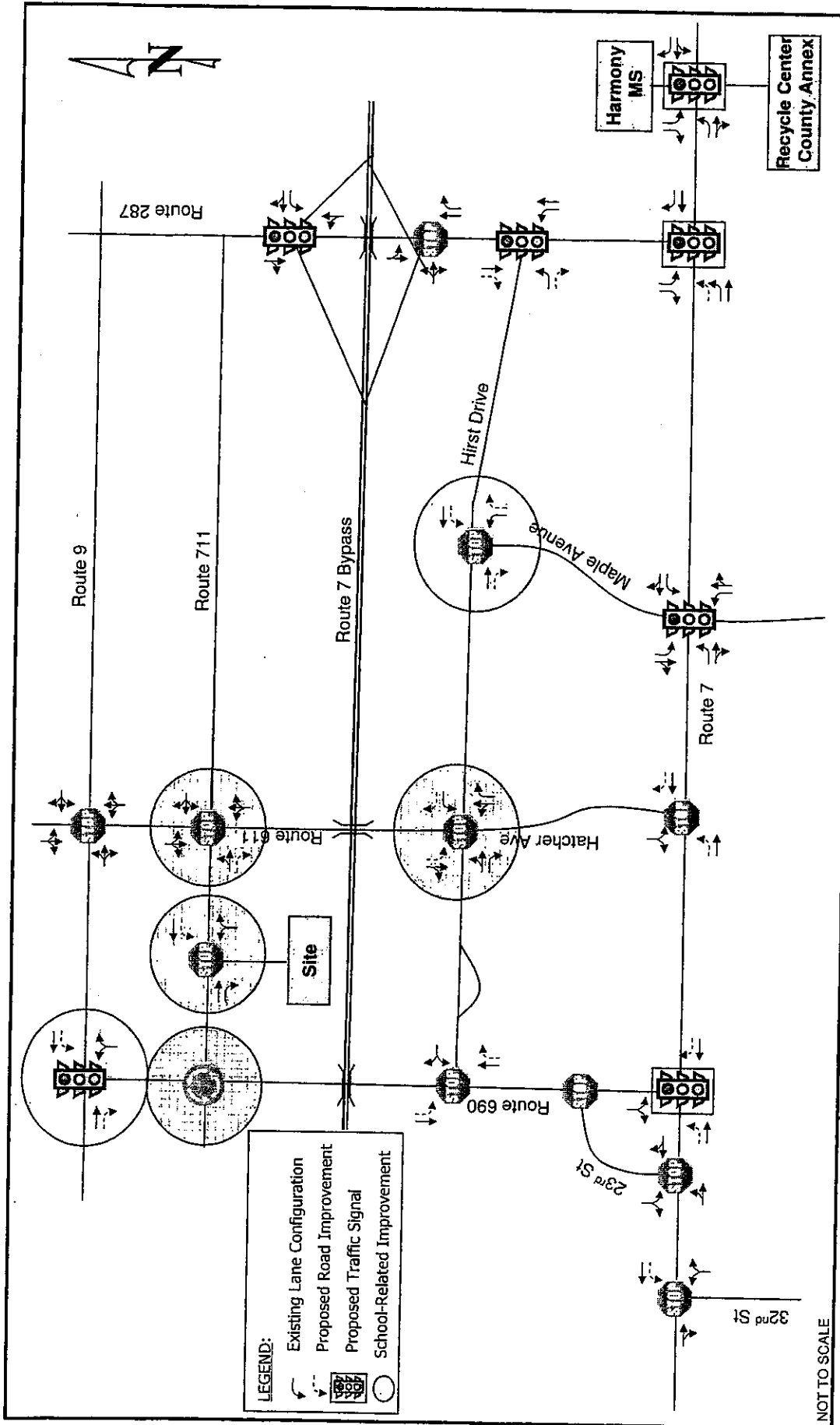
**Figure
 2**



**Fields Farm High School
 LCPS Site Traffic Volumes
 Purcellville, Virginia**

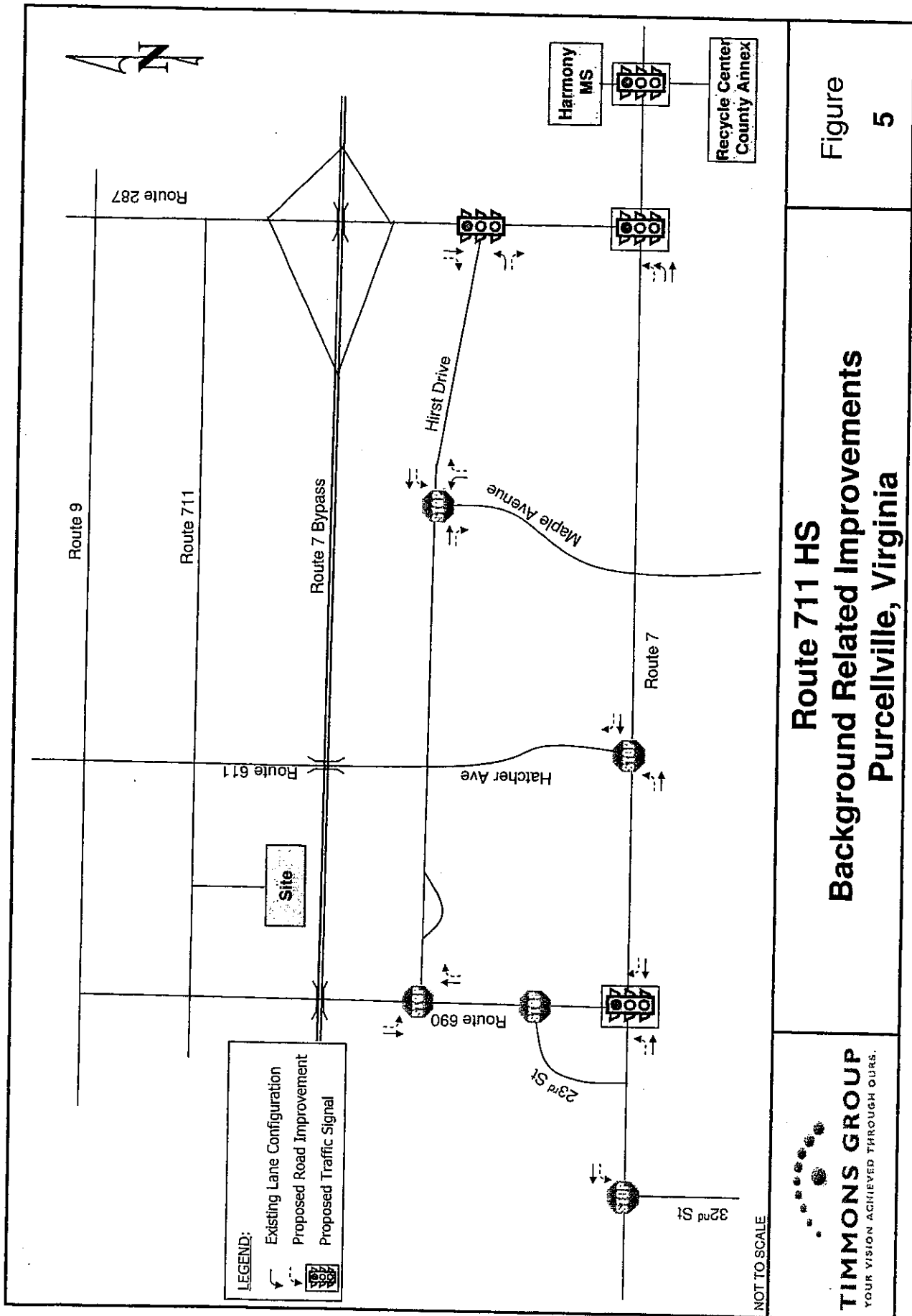
**Figure
 3**

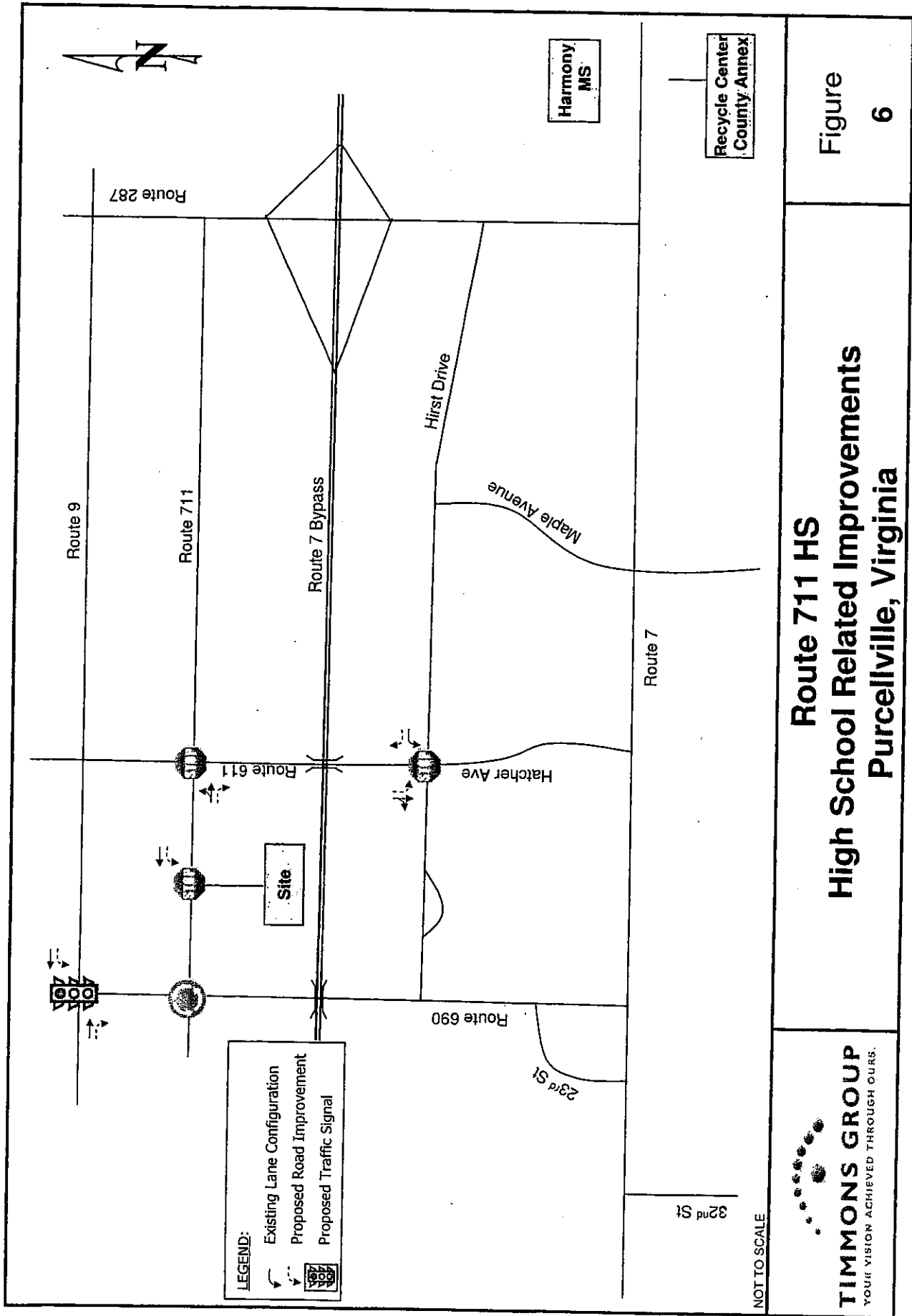
TIMMONS GROUP
 YOUR VISION ACHIEVED THROUGH OURS



Route 711 HS
Proposed Roadway Improvements
Purcellville, Virginia

Figure 4





Responses to Purcellville's June 5, 2006 HS-3 Comments

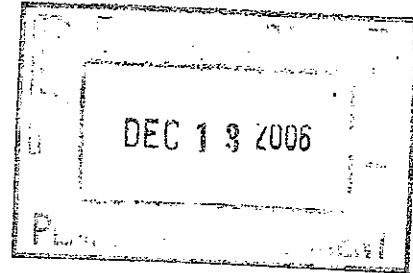


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Background Information

Traffic impact analyses do not:

1. **Provide an indication of development's impact on other modes of transportation, such as bus service.**

Response: The purpose of this traffic impact study was to assess the impact of site-generated traffic on the transportation infrastructure surrounding the proposed school site, not individual components of the existing traffic stream.

2. **Characterize the suitability of a development for other modes, particularly pedestrian and bicycle movement.**

Response: The location of the proposed high school is north of the Town of Purcellville and will be developed with an internal pedestrian network that will connect to the proposed pedestrian network of the Upper Loudoun Football League, which will ultimately connect to the Town's pedestrian system at Route 690. From a practical standpoint, the size of a high school and the rural location is not conducive to pedestrian and bicycle traffic. Nonetheless, a pedestrian network will be available for those who wish to walk or bike.

3. **Characterize the spatial patterns of demand, particularly where alternate route seekers will travel.**

Response: The distribution of site-generated trips was discussed with, and approved by, the Loudoun County Office of Transportation Services (OTS).

Data Collection

1. **The report incorrectly identifies that analysis is for the proposed elementary school. The new Western Loudoun HS-3 is the impact which should be addressed.**

Response: A previous draft of the traffic study that was submitted to the County for review contained a typo that incorrectly identified the proposed school as an elementary school. The revised traffic impact analysis, dated May 30, 2006, was submitted to the Town of Purcellville for review. The submitted traffic study was prepared for the proposed high school which has a capacity of 1,600-students and will have approximately 200 staff members.

2. **The peak hour is identified for the AM period as 7 to 9am and the PM period 2 to 4 PM which is not consistent with the Town peak hour traffic or the peak periods used on other high school traffic studies used for Western Loudoun HS-3 (Hamilton's for example).**

Response: The 7-9 AM and 2-4 PM peaks (established for traffic data collection purposes) are consistent with the peaks of the proposed high school. Typically, trip generation by a high school from 4-6 PM is 50% or less of that seen from 2-4 PM. Analyzing the road network during the site-generated peak allows for a more accurate assessment of the development-related impacts.

The traffic report prepared for the Nichols Property (Hamilton) included the 4-6 PM peak hour because primary access to the school site was within the Town limits directly at Business Route 7. In that instance, the potential overlap of commuter traffic, school traffic, and adjacent residential-related traffic was a greater concern.

The Fields Property is located in a rural area, away from the Town of Purcellville, with limited surrounding residential growth and background traffic. The location of the proposed school, along with a road network that allows school-related traffic to bypass the already congested Main Street Corridor in Purcellville, did not lend itself to a 4-6 PM analysis.

3. What month of year were the data collected?

Response: Data collection was divided into 2 phases one at the end of the 2004-2005 school year and a second at the beginning of the 2005-2006 school year.

The first phase (May/June 2005) included the following 9 intersections:

- 1) Route 287/Hirst Drive (5-24-2005)
- 2) Route 287/ EB Bypass Off ramp (5-24-2005)
- 3) Hirst Drive/Hatcher Avenue (5-24-2005)
- 4) Harmony MS/Business Route 7 (6-1-2005)
- 5) Hirst Drive/Maple Avenue (6-1-2005)
- 6) Route 287/WB Bypass Off ramp (6-1-2005)
- 7) Hirst Drive/Route 690 (6-2-2005)
- 8) Route 287/Business Route 7 (6-2-2005)
- 9) Route 690/Route 711 (6-2-2005)

The second phase (September 2005) included the following 9 intersections:

- 1) Route 9/Route 690 (9-13-2005)
- 2) Route 611/ Route 711 (9-13-2005)
- 3) Route 9/Route 611 (9-13-2005)
- 4) Business Route 7/Maple Avenue (9-13-2005)
- 5) Route 7/23rd Street (9-14-2005)
- 6) Route 690/23rd Street (9-14-2005)
- 7) Business Route 7/21st-22nd Street (9-14-2005)
- 8) Business Route 7/Hatcher Avenue (9-14-2005)
- 9) Route 7/32nd Street (9-15-2005)

The data collection sheets for each individual intersection were provided in Appendix C of the traffic impact analysis dated May 30, 2006

4. What was the duration of the collection? Was it during the "peak hour" or a portion and then extrapolated?

Response: Data collection occurred between 7-9 AM and 2-4 PM. The data was collected by individuals using electronic count boards to record the movement of individual vehicles at each of the locations listed under Item #3. Data was collected continuously throughout each two-hour time period. No extrapolation was performed.

5. Where there any unusual events such as road closures or school closures during the period the data were collected? Is the study area large enough to include all significant impacts from the development?

Response: No events that would impact traffic flow or volumes were noted during the data collection. If an accident or road closure occurs, traffic counters are instructed to stop counting and return another day and re-count the entire 2-hour time period.

The limits of the study area were established by the Office of Transportation Services in consultation with the Town of Purcellville (see Question #6).

6. Does it include all critical intersections?

Response: The project limits identified in the original scoping agreement with the Office of Transportation Services included 4 intersections in the immediate vicinity of the proposed high school.

A revised study outline was presented to Loudoun County Public Schools by the Office of Transportation Services after soliciting input from the Town of Purcellville; the revised study outline included 18 intersections listed in the response to Question #3. The additional intersections requested specifically by the Town (via e-mail) were limited to the Main Street corridor. The list of intersections for inclusion within the Town was compiled with input from the Town's Public Works Committee and members of Council and staff.

The study addresses each of the intersections required under the final scoping agreement provided by the Office of Transportation Services. A copy is contained in Appendix A of the traffic impact analysis dated May 30, 2006.

7. Were traffic counts taken during the critical time periods?

Response: This has been addressed in the response to Questions #2 and #4.

8. Are traffic counts recent?

Response: This has been addressed in the response to Question #3.

9. Have all the assumptions used in the technical analysis been clearly identified?

Response: All assumptions regarding background traffic, trip generation, trip distribution, and the existing/proposed roadway infrastructure have been clearly identified. Other assumptions used in the analysis are consistent with procedures established the Loudoun County Office of Transportation Services and the Virginia Department of Transportation.

10. Do calculated levels of service seem reasonable?

Response: The calculated levels of service meet the standards established the Loudoun County Office of Transportation Services and the Virginia Department of Transportation.

Trip generation

1. Does the description of the proposed site agree with the site plan submitted? This is difficult to determine given that no plan was provided.

Response: Yes. The traffic impact study was submitted to Loudoun County as part of a packet that included the site plan.

2. Have trip rates been adjusted to account for public transportation, pedestrians or pass-by-trips?

Response: No. It is not standard to assume a trip reduction for a proposed school due to public transportation, pedestrians, or pass-by-trips. These factors are typically applied in more dense, urban areas where patrons have greater access to public transportation and/or origins and destinations for a particular trip are located proximal to one another which increase the likelihood of walking.

3. Does the directional distribution of the site traffic seem reasonable?

Response: The directional distribution of traffic is based on the location of the potential student population and the available road network that links the students to the proposed high school. The location of the anticipated student population is based on 2005 enrollment figures. All students were geocoded utilizing ARC-INFO, thus providing accurate data based on each student's residential location. The student populations for grades 6, 7, 8, and 9 were used as a basis for the location of the students who would potentially be attending HS-3 in the fall of 2008.

With regard to the road network, it was assumed that no new thoroughfares would be in place prior to the projected 2008 opening. This approach provides a conservative estimate of the potential impacts by placing the additional site-generated traffic on those roads that are currently in place and would be affected if a potential road improvement were not constructed.

4. Has pedestrian circulation been accommodated?

Response: As noted in the response to Question #12 above, the rural location of this site does not lend itself to a convenient pedestrian network. An internal pedestrian system will be provided among the school facilities and is depicted as a part of the Special Exception and site plan for the proposed high school. The internal pedestrian system connects to the pedestrian system proposed as a part of the Upper Loudoun Youth Football League project, which ultimately connects to the Town's pedestrian network.

5. Has adequate parking been provided to meet demand?

Response: A typical 1,600-student high school includes approximately 800 parking spaces to accommodate both staff and students. The proposed Fields Farm high school special exception includes for 1,025 spaces.

It is acknowledged that students at other school sites often park in adjacent private lots or along public streets and walk to campus. Given the location of the proposed high school and the lack of alternative parking areas in the immediate vicinity, this should not be an issue at this location.

6. What were the assumptions about bus ridership? Based on recent surveys by the COPE, the vast majority of 11th and 12th grade students indicated they drove or rode with someone who did.

The real problem with *Parking Generation* and *Trip Generation* is that they measure the peak parking demand and the number of vehicle trips at suburban sites with ample free parking and no public transit. Using these precise but poorly understood parking and trip generation rates as a guide to planning leads to bad transportation and land-use decisions. *Parking Generation* and *Trip Generation* are helpful resources in designing cities where everyone will drive everywhere they go and park free when they get there.

These rates are national averages and may vary from area to area. In some cases, land use types are represented by trip rates based on only a few samples. In other cases, some land use types are not represented at all. The shortcomings of the ITE trip manual are evident in the wide range of rates it provides for land use types. We recommend that the report supplement the ITE trip data with local data that has been collected at similar sites. In this manner a more complete and accurate picture of trip rates for the HS-3 can be predicted. A nearby comparable locality (Lancaster, Pa.) uses the following estimates of trip generation for a public high school -16.3 trips per employee plus 1.4 trips per student.

Response: Officials from LCPS have projected that approximately 40 school busses will be servicing the proposed high school.

The proposed high school is a facility that will be located in a suburban/rural area with ample free parking for students/faculty and no public transit.

Loudoun County Public schools collected AM and PM peak traffic volumes at the following 9 school sites within Loudoun County:

- | | |
|-----------------------------|-----------------------|
| ➤ Evergreen Mill Elementary | ➤ Blue Ridge Middle |
| ➤ Lovettsville Elementary | ➤ J.L. Simpson Middle |
| ➤ Mountain View Elementary | ➤ Heritage High |
| ➤ Round Hill Elementary | ➤ Loudoun County High |
| ➤ Harmony Intermediate | |

This data indicated that the travel patterns at each school level (elementary, middle, and high school) were comparable to the ITE rates with regard to both trip generation and directional split during the peak hours for each of the school types.

With regard to the trip generation rates for Lancaster, PA, we spoke to Dave Royer with the Lancaster County Planning Commission (LCPC) to verify this information. The data quoted in Question #16, and shown on the LCPC website, is actually ITE trip generation data (likely from a previous edition). Mr. Royer verified that these rates are to be applied independently of one another (and are not additive). The current ITE manual shows trip generation rates of 19.74 trips per employee and 1.71 trips per student; these are provided as two options for evaluating the trip generation potential of the entire facility. The student rate was used in our traffic impact study.

Traffic Distribution

1. The report should identify which schools were included in the "distribution of school generated traffic estimates", Just that for HS-3?

Response: As is customary, the distribution of new trips analyzed in the report only addresses the traffic generated by the proposed development being analyzed, in this case HS-3. Trips generated by other schools, or other developments for that matter, are presumed to be included in the projected background traffic.

Based on the traffic data collected, the peak hour of the adjacent street traffic was determined to be from 7:30 – 8:30 AM. Loudoun County Public Schools provided the following start times for schools in this area:

Elementary School – 7:50am

Middle School – 8:40 am

High School – 8:55

As a conservative measure, we analyzed the proposed high school traffic as if it was on the streets during the peak hour of adjacent street traffic (7:30 – 8:30) which also happens to coincide with the peak hour for the elementary school(s). In actuality, there will be little to no overlap between traffic from the proposed high school and the elementary school(s). Given the approximate one-hour separation in start times, elementary school traffic will have reached its destination, be it school or back home, well before high school-related trips begin to affect traffic flows on the surrounding transportation network.

2. Provide the preliminary attendance boundaries identified.

Response: A copy of the map is attached for your reference.

3. Was the distribution of the student population based on a current estimate? Five-year estimate? Twenty-year projection? Or a location of possible attendees for 2008?

Response: This has been addressed in the response to Question #13.

4. Why was the projected background traffic projection limited to 2008? Are there any available figures for the periods beyond the 2008 timeframe?

Response: The Office of Transportation Services provided this time horizon in the scoping agreement.

The projected opening year of the high school is 2008. Traffic growth, and potential operational shortcomings, that may arise beyond this data would be attributable to background traffic and not directly related to the high school.

It should be noted that the traffic study provides a conservative estimate of 2008 traffic conditions. For the purposes of the study only, it was assumed that that high school would open at full capacity (i.e. 1,600 students). However, it is likely that the entering high school class (grades 9 through 12) will consist of approximately 1,100 students. This would equate to a 30% reduction in projected traffic volumes at school opening.

Traffic Capacity Analysis

1. Are there other level of service programs available? Why was Synchro used?

Response: Synchro calculates levels of service and delay using the same formulas and algorithms as HCS2000. In addition, Synchro is a "visual" tool that allows the user (as well as local officials and the public) to observe the traffic model in operation and does a better job of identifying "spillback" between adjacent intersections. HCS2000 is more static and provides less information with regard to network operations as a whole.

2. Were there any assumptions required to be made? If so list them.

Response: This has been addressed in the response to Question #9.

The default values provided by Synchro for the traffic analysis were not changed. Signal timing and phasing information for the existing signalized intersections were obtained from the Virginia Department of Transportation.

Reviews of Proposed Improvements

1. What study was used to determine the roadway improvements to accommodate projected background traffic? Within the Town? Within the UGA? These should be specifically listed to validate.

Response: The proposed improvements listed in the traffic study are based on work performed specifically for the proposed high school. No outside studies were referenced for these improvements. Two main criteria were considered when determining improvements:

- *existing/projected levels of service*
- *existing/projected volumes*

The analyzed intersections were first looked at from an operational standpoint. Capacity analyses were performed using Synchro to determine traffic queues and delays associated with each individual intersection approach. If excessive queues or unacceptable levels of service were noted, improvements to remediate problems were considered.

In addition, all of the intersections volumes in the study were applied to the turn lane nomographs contained in the VDOT Road Design Manual to determine if existing or future volumes warranted the installation of auxiliary turn lanes per VDOT guidelines.

2. Appendix B was not provided.

Response: Appendix B was provided with the revised traffic impact analysis dated May 30, 2006 submitted to the Town of Purcellville for review.

Existing roadways and Background Traffic Volumes

1. **What basis is used to identify that the condition of Business Route 7 is "good"? What segments - the entire length from Route 690 to Route 287? What about future conditions?**

Response: The term "good" refers to the physical appearance/state of the road itself; the road is not in disrepair and is capable of safely accommodating traffic. This text is taken from a portion of the report designed to give the reader a general overview of existing roadway and traffic conditions, not provide a technical analysis. Traffic volumes along the Business Route 7 corridor are expected to increase.

2. **What basis is used to determine that morning and evening peak traffic movements along the Route 9 route are "significant"? What about future conditions?**

Response: Again, this text is taken from a portion of the report designed to give the reader a general overview of roadway and traffic conditions, not a technical analysis. Route 9 is a 2-lane facility with traffic counts indicating an AADT volume of 16,000 vehicles per day. AM peak hour counts indicated approximately 1,000 eastbound vehicles during the AM peak hour and 750 westbound vehicles during the PM peak hour. Traffic volumes along the Route 9 corridor are expected to increase.

3. **What basis was used to identify that congestion along Route 287, especially along the Route 7 Bypass interchange, are "significant"? What about future conditions?**

Response: Same response as above.

4. **What basis was used to identify that traffic north of Alder School Road is "minimal"? What about future traffic volumes?**

Response: Same response as above. Directional turning movement counts indicated that 30 or fewer vehicles (north and southbound combined) during the 7-9 AM or 2-4 PM counts. This study did not assume paving the northern section of Rote 611 (Purcellville Road). Traffic volumes along Route 611 are expected to increase.

5. **Why weren't background traffic counts obtained during the true peak hour?**

Response: This has been addressed in the response to Question #2.

6. **Appendix C was not provided.**

Response: Appendix C was provided with the revised traffic impact analysis dated May 30, 2006 submitted to the Town of Purcellville for review

7. **Did the traffic analysis include estimates of future traffic volumes from currently undeveloped areas within the project study? A simple future projection would not include concentrated traffic at locations such as the Cole Fann, 21st Street Redevelopment, Bowman townhouse development, and Browning Industrial Park for example.**

Response: A draft copy of the traffic impact study scoping agreement was shared with the Town of Purcellville (Public Works Committee, Council, and staff). This draft did not include any of the developments listed above and representatives did not request that any of these developments be included in the background traffic growth assumptions.

An overall annual growth rate of 5% applied to background traffic to account for anticipated background traffic growth. The original scoping agreement indicated an annual background growth rate of 3%; this was increased to 5% at the Town's request.

Trip Generation and Distribution

1. Why was the number of students used as the sole independent variable?

Other transportation experts have noted that a better "all-around predictor" of trips at a high school would be "total number of employees + number of students." Simply put, the number of trips at a high school is a function of the number of persons who are supposed to be there every day. A more accurate predictor would probably be "total number of employees + number of students of driving age or with access to an automobile," though this information may not be as easily obtained.

The classroom of students is not the only possible generator of trip ends at a particular site. For example, the addition of a coach or arts instructor ("employees") for a new sport or artistic activity might lead to an increase in trip ends from the new activity (parents picking up students after practices, friends attending games or performances, and so forth). So while a new cafeteria worker might lead to a modest increase in trip ends, another type of new employee might lead to a great increase in trip ends without any new students. Staffing ("total employees") at schools is affected by the number of students assigned and by regulatory and administrative policies which may affect trip ends. In sum, they have concluded that "employees" may be a significantly better predictor variable than "students" in a statistical sense and is a more comprehensive variable in a practical sense.

Response: This has been addressed in the response to Question #16. Our analysis was conducted in accordance with generally accepted standards of practice established by the Institute of Transportation Engineers, the Virginia Department of Transportation and the Loudoun County Office of Transportation Services.

2. At the May 24th Special Exception meeting, the School Board identified that the high school would share an entrance with Mountain View while this report identifies that it will not. Which is correct?

Response: The proposed high school will share an entrance with Mountain View Elementary School. The revised traffic impact analysis dated May 30, 2006 indicates the same.

3. Figure 4 - Provide the assumptions used to generate the site traffic distribution estimates for routes to the proposed high school HS-3.

Response: This has been addressed in the response to Question #13.

Capacity Analysis

1. What assumed roadway improvements for background traffic were used to estimate LOS for the various locations?

Response: This has been addressed in the response to Question #23. No specific improvements were assumed to be in place for the background conditions.

2. Some of the existing traffic congestion identified as background traffic is in fact related to existing school traffic yet is discounted as not being related to school factors.

Response: Some of the existing traffic may very well be attributable to existing local schools; the traffic report does not refute this. However, it is important to note that the purpose of the traffic study is to (1) identify existing problems (which it has) and (2) provide recommendations aimed at accommodating traffic generated by the proposed development. Existing traffic congestion is not due to the proposed school, it is a pre-existing condition.

Recommended Improvements

1. From what source document was it concluded that existing non-high school related improvements listed for Main Street in the Central Business District will require additional pavement width?

Response: The study indicates that existing traffic volumes satisfy VDOT's Road Design Manual criteria for installing a turn lane. A 3-lane section of roadway would require a minimum of 33' to 36' of pavement (again based on VDOT criteria). Business Route 7 (Main Street), as it exists today, has that pavement width available, but a portion of this roadway is designated for on-street parking. If that on-street parking were removed, the road could be re-striped and the auxiliary lanes could be added, without the need to impact existing curb lines, right of way, or building setbacks. Improvements to Main Street that did not eliminate some on-street parking would, by definition, require additional pavement width.

2. Who determined that the more cost effective approach to this improvement would be the removal of on-street parking along Main Street?

Response: This is a purely quantitative comparison. Re-striping a street is less expensive than obtaining right of way, installing additional pavement and curbing, and addressing the relocation of utilities and drainage structures.

3. Appendix D was not provided.

Response: Appendix D was provided with the revised traffic impact analysis dated May 30, 2006.

Preliminary Attendance Boundary for HS-3 for Traffic Analysis Purposes

